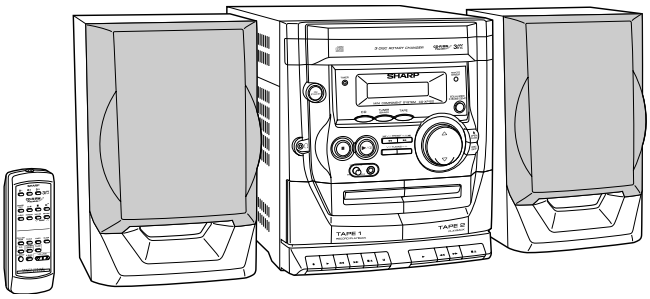
# SHARP SERVICE MANUAL

No. S7254CDXP120W



## MINI COMPONENT SYSTEM

# MODEL CD-XP120W

**CD-XP120W Mini Component System consisting of CD-XP120W (main unit) and CP-XP120 (speaker system).**

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

COMPACT disc DIGITAL AUDIO

CD-R/RW Playable

3 DISC

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SHARP CORPORATION

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The contents are subject to change without notice.

# SAFETY PRECAUTION FOR SERVICE MANUAL

**WARNINGS**

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1. THEREFORE IT IS IMPORTANT THAT THE FOLLOWING PRECAUTIONS ARE OBSERVED DURING SERVICING TO PROTECT YOUR EYES AGAINST EXPOSURE TO THE LASER BEAM.

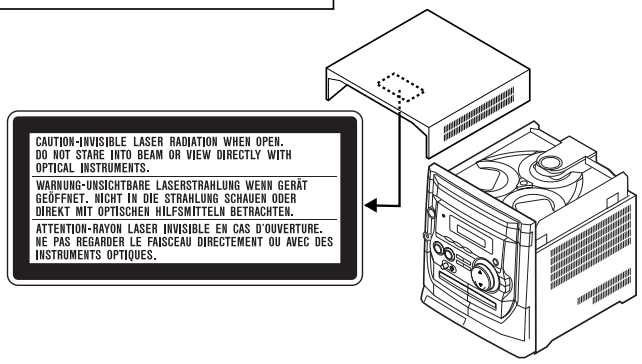
**1-WHEN THE CABINET IS REMOVED, THE POWER IS TURNED ON WITHOUT A COMPACT DISC IN POSITION AND THE PICKUP IS ON THE OUTER EDGE THE LASER WILL LIGHT FOR SEVERAL SECONDS TO DETECT A DISC. DO NOT LOOK INTO THE PICKUP LENS.**

**2-THE LASER POWER OUTPUT OF THE PICKUP UNIT AND REPLACEMENT SERVICE PARTS ARE ALL FACTORY PRESET BEFORE SHIPMENT.**
**DO NOT ATTEMPT TO READJUST THE LASER PICKUP UNIT DURING REPLACEMENT OR SERVICING.**

**3-UNDER NO CIRCUMSTANCES STARE INTO THE PICKUP LENS AT ANY TIME.**

**4-CAUTION-USE OF CONTROLS OR ADJUSTMENTS, OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.**

Laser Diode Properties
Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW


CAUTION-INVISIBLE LASER RADIATION WHEN OPEN.
DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
WARNUNG-UNSICHTBARE LASERSTRAHLUNG WENN GERÄT GEÖFFNET. NICHT IN DIE STRAHLUNG SCHAUEN ODER DIREKT MIT OPTISCHEN HILFSMITTELN BETRACHTEN.
ATTENTION-RAYON LASER INVISIBLE EN CAS D'OUVERTURE. NE PAS REGARDER LE FAISCEAU DIRECTEMENT OU AVEC DES INSTRUMENTS OPTIQUES.

## VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows.
Turn the selector with a screwdriver until the appropriate voltage number appears in the window (110 V, 127 V, 220 V or 230 V - 240 V AC).

## AC POWER SUPPLY CORD

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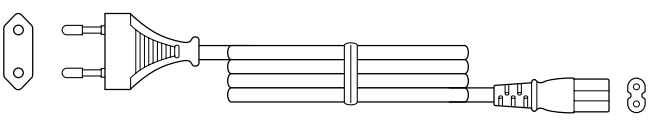

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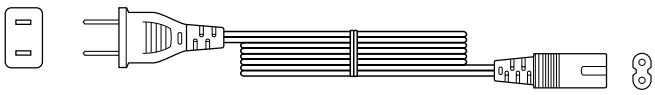

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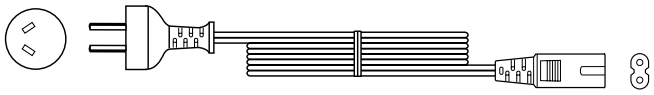


FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

# SPECIFICATIONS

**CD-XP120W**

## ■ General

| | |
|---|---|
| **Power source** | AC 110/127/220/230 - 240 V, 50/60 Hz |
| **Power consumption** | 48 W |
| **Dimensions** | Width: 270 mm (10-5/8")<br>Height: 305 mm (12")<br>Depth: 343 mm (13-1/2") |
| **Weight** | 6.4 kg (14.1 lbs.) |

## ■ Amplifier

| | |
|---|---|
| **Output power** | MPO: 60 W (30 W + 30 W) (10 % T.H.D.)<br>RMS: 40 W (20 W + 20 W) (10 % T.H.D.)<br>RMS: 30 W (15 W + 15 W) (0.9 % T.H.D.) |
| **Output terminals** | Speakers: 8 ohms<br>Headphones: 16 - 50 ohms (recommended: 32 ohms) |
| **Output terminals** | Microphone: 1 mV/600 ohms |

## ■ CD player

| | |
|---|---|
| **Type** | 3-disc multi-play compact disc player |
| **Signal readout** | Non-contact, 3-beam semiconductor laser pickup |
| **D/A converter** | 1-bit D/A converter |
| **Frequency response** | 20 - 20,000 Hz |
| **Dynamic range** | 90 dB (1 kHz) |

## ■ Tuner

| | |
|---|---|
| **Frequency range** | FM: 88 - 108 MHz<br>AM: 531 - 1,602 kHz |

## ■ Cassette deck

| | |
|---|---|
| **Frequency response** | 125 - 8,000 Hz (Normal tape) |
| **Signal/noise ratio** | 50 dB (TAPE 1, recording/playback)<br>50 dB (TAPE 2, playback) |
| **Wow and flutter** | 0.3 % (WRMS) |

**CP-XP120**

| | |
|---|---|
| **Type** | 2-way type speaker system<br>Tweeter<br>10 cm (4") Woofer |
| **Maximum input power** | 40 W |
| **Rated input power** | 20 W |
| **Impedance** | 8 ohms |
| **Dimensions** | Width: 200 mm (7-7/8")<br>Height: 305 mm (12")<br>Depth: 167 mm (6-9/16") |
| **Weight** | 2.1 kg (4.6 lbs.)/each |

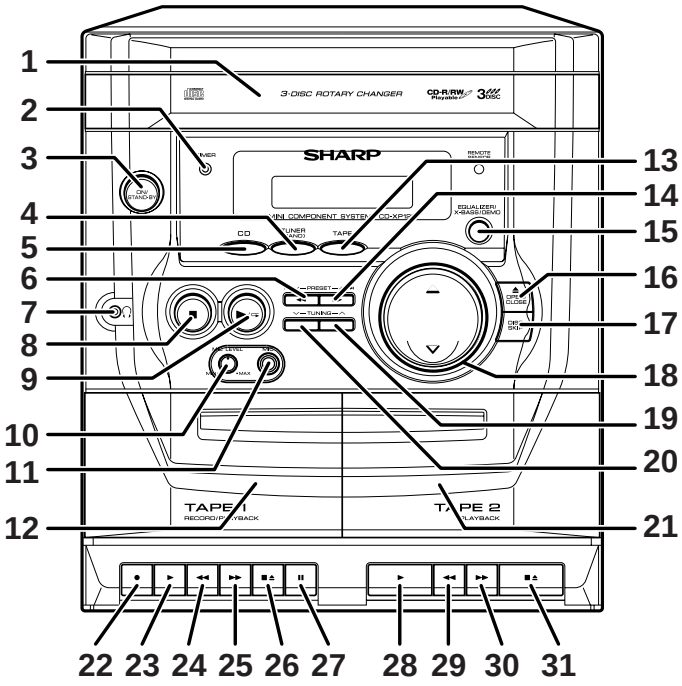
Specifications for this model are subject to change without prior notice.

# NAMES OF PARTS

**CD-XP120W**

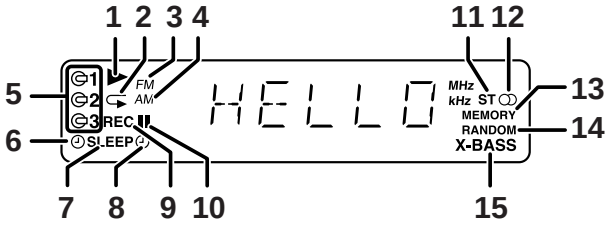
## ■ Front panel

1. Disc Tray
2. Timer Set Indicator
3. On/Stand-by Button
4. Tuner (Band) Button
5. CD Button
6. CD Track Down or Fast Reverse, Tuner Preset Down Button
7. Headphone Socket
8. CD Stop Button
9. CD Play or Repeat Button
10. Microphone Level Control
11. Microphone Socket
12. Tape 1 Cassette Compartment
13. Tape Button
14. CD Track Up or Fast Forward, Tuner Preset Up Button
15. Equaliser Mode Select/Extra Bass/ Demo Mode Button
16. Disc Tray Open/Close Button
17. Disc Skip Button
18. Volume Up and Down Buttons
19. Tuning Up Button
20. Tuning Down Button
21. Tape 2 Cassette Compartment
22. Tape 1 Record Button
23. Tape 1 Play Button
24. Tape 1 Rewind Button
25. Tape 1 Fast Forward Button
26. Tape 1 Stop/Eject Button
27. Tape 1 Pause Button
28. Tape 2 Play Button
29. Tape 2 Rewind Button
30. Tape 2 Fast Forward Button
31. Tape 2 Stop/Eject Button



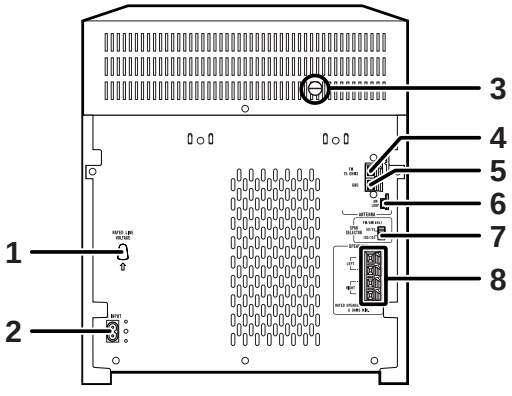

## ■ Display

1. CD Play Indicator
2. CD Repeat Play Indicator
3. FM Station Indicator
4. AM Station Indicator
5. Disc Number Indicators
6. Clock Indicator
7. Sleep Indicator
8. Timer Play Indicator
9. Tape 1 Record Indicator
10. CD Pause Indicator
11. FM Stereo Mode Indicator
12. FM Stereo Receiving Indicator
13. Memory Indicator
14. CD Random Play Indicator
15. Extra Bass Indicator




## ■ Rear panel

1. AC Voltage Selector
2. AC Power Input Socket
3. Transport Screw
4. FM 75 Ohms Aerial Terminal
5. FM Aerial Earth Terminal
6. AM Loop Aerial Socket
7. Span Selector Switch
8. Speaker Terminals

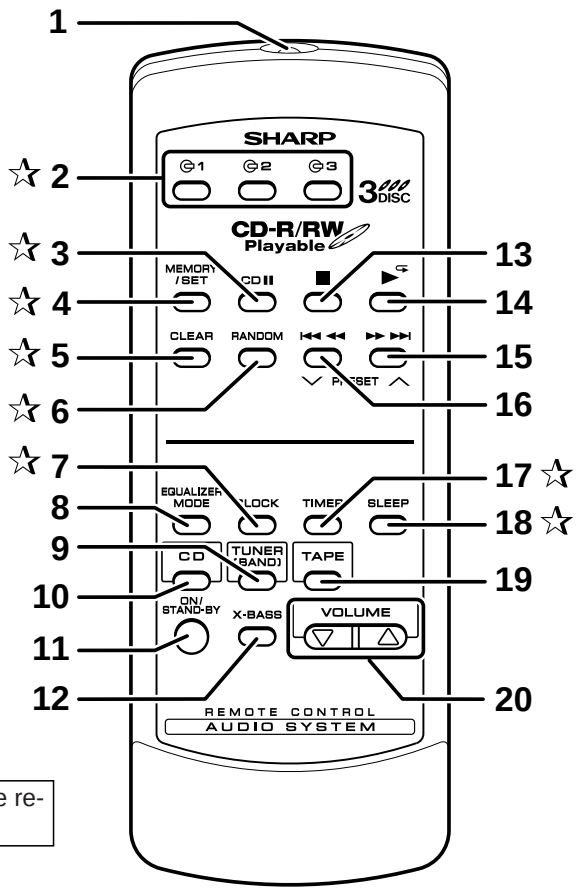


**CD-XP120W**

## ■ Remote control

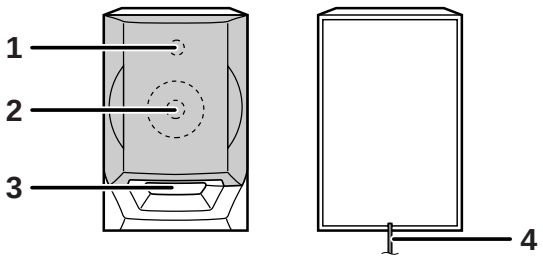
**1.** Remote Control Transmitter
**2. Disc Number Select Buttons**
**3. CD Pause Button**
**4. Memory/Set Button**
**5. Clear Button**
**6. CD Random Button**
**7. Clock Button**
**8.** Equaliser Mode Select Button
**9.** Tuner (Band) Button
**10.** CD Button
**11.** On/Stand-by Button
**12.** Extra Bass Button
**13.** CD Stop Button
**14.** CD Play or Repeat Button
**15.** CD Track Up or Fast Forward, Tuner Preset Up Button
**16.** CD Track Down or Fast Reverse, Tuner Preset Down Button
**17. Timer Button**
**18. Sleep Button**
**19.** Tape Button
**20.** Volume Up and Down Buttons

Buttons with "☆" mark in the illustration can be operated on the remote control only.




**CP-XP120**

**1. Tweeter**
**2. Woofer**
**3. Bass Reflex Duct**
**4. Speaker Wire**



# DISASSEMBLY

**Caution on Disassembly**

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

**CD-XP120W**

| STEP | REMOVAL | PROCEDURE | FIGURE |
|---|---|---|---|
| 1 | Top Cabinet | 1. Screw ..... (A1) x5 | 6-1 |
| 2 | Side Panel (Left/Right) | 1. Screw ..... (B1) x6 | 6-1 |
| 3 | CD Player Unit | 1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close.<br>2. CD Tray Cover ..... (C1) x1<br>4. Screw ..... (C2) x2<br>3. Hook ..... (C3) x2<br>4. Socket ..... (C4) x4 | 6-2<br><br><br><br>6-3 |
| 4 | Rear Panel | 1. Screw ..... (D1) x8 | 6-2 |
| 5 | Main PWB | 1. Screw ..... (E1) x5<br>2. Socket ..... (E2) x8 | 6-2,6-3<br>6-3 |
| 6 | Front Panel | 1. Screw ..... (F1) x3<br>2. Hook ..... (F2) x2 | 6-3 |
| 7 | Switch A PWB | 1. Screw ..... (G1) x3<br>2. Socket ..... (G2) x1 | 7-1 |
| 8 | Display PWB | 1. Screw ..... (H1) x10 | 7-1 |
| 9 | Tape Mechanism | 1. Open the cassette holder.<br>2. Screw..... (J1) x8 | 7-1 |
| 10 | Headphones PWB | 1. Screw ..... (K1) x1 | 7-1 |
| 11 | Mic PWB | 1. Screw ..... (L1) x2 | 7-1 |
| 12 | Turntable | 1. Screw ..... (M1) x1<br>2. Spacer ..... (M2) x1 | 7-2 |
| 13 | Loading Tray | 1. Push forward the loading tray.<br>2. Inserting the flat head into the hole, push in the direction indicated by the arrow. ... (N1) x2 | 7-2 |
| 14 | CD Servo PWB (Note 1) | 1. Screw ..... (P1) x3<br>2. Socket ..... (P2) x5 | 7-3 |
| 15 | Switch B PWB | 1. Screw ..... (Q1) x2 | 7-3 |
| 16 | CD Mechanism | 1. Screw ..... (R1) x4<br>2. Spring ..... (R2) x4 | 7-4 |

**Note 1:**

1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electrostatic damage.

**CD-XP120W**

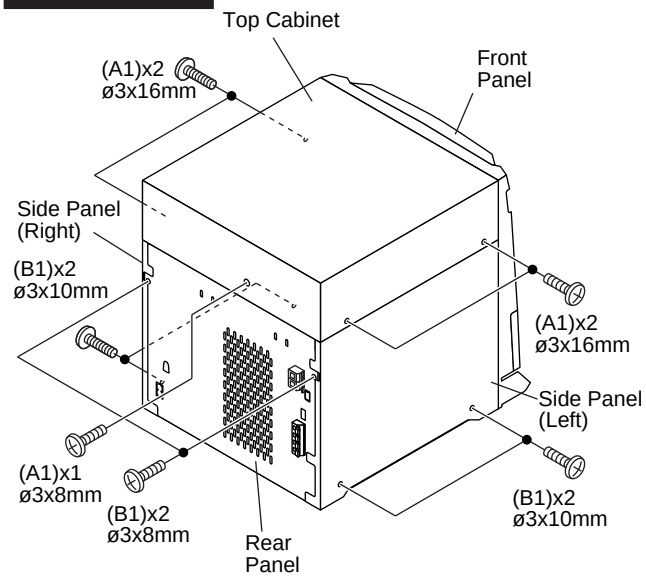



**Figure 6-1**

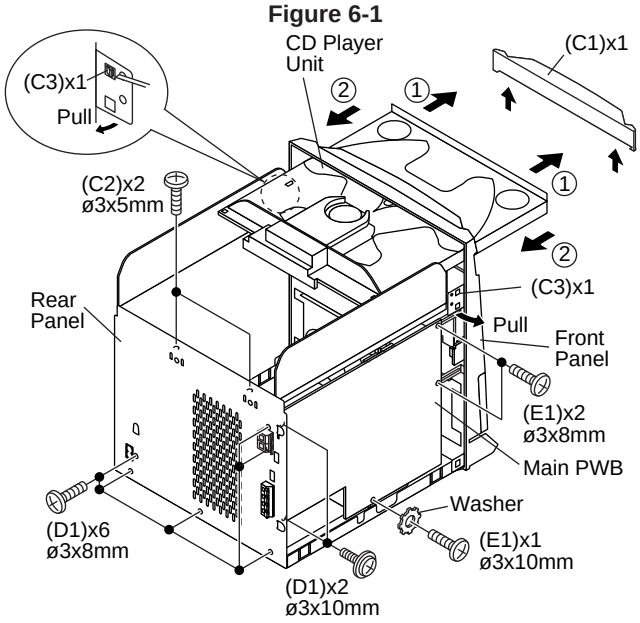



**Figure 6-2**

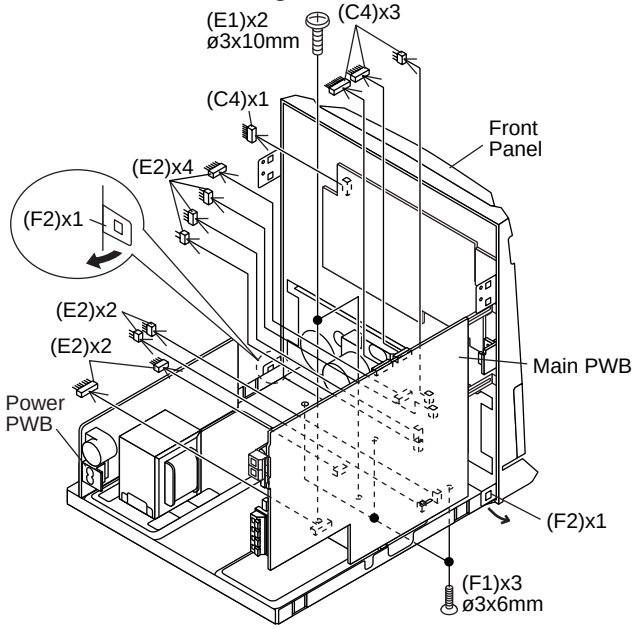



**Figure 6-3**

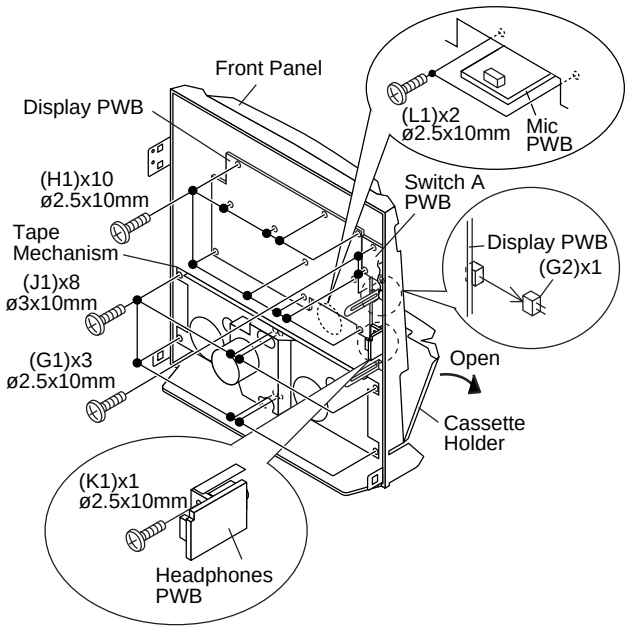



**Figure 7-1**

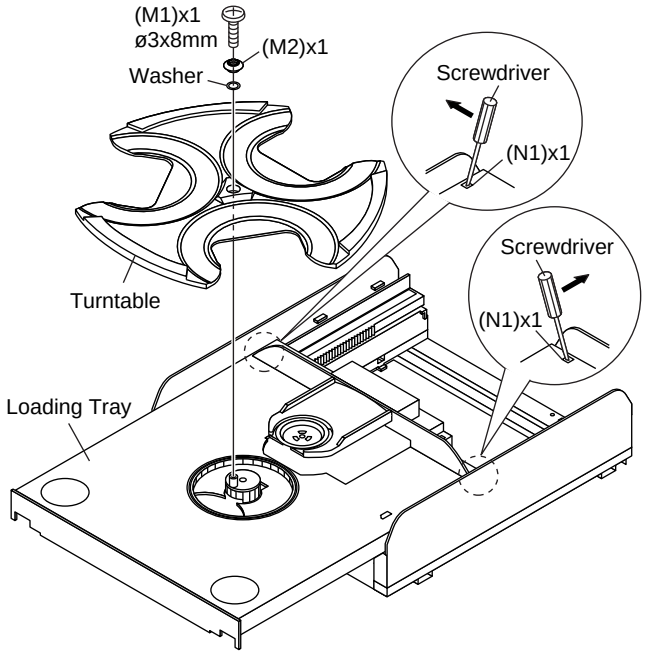



**Figure 7-2**

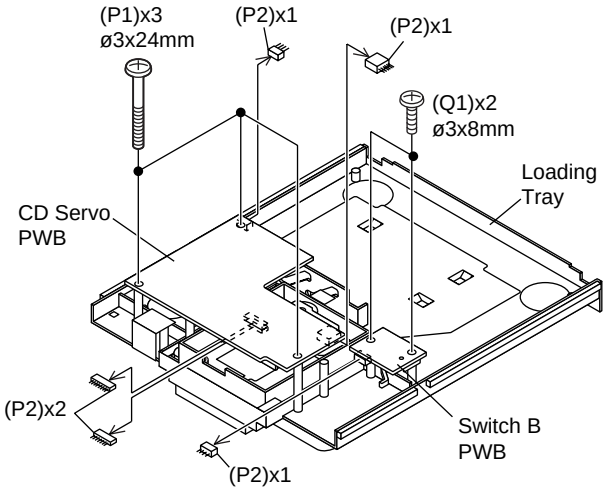



**Figure 7-3**

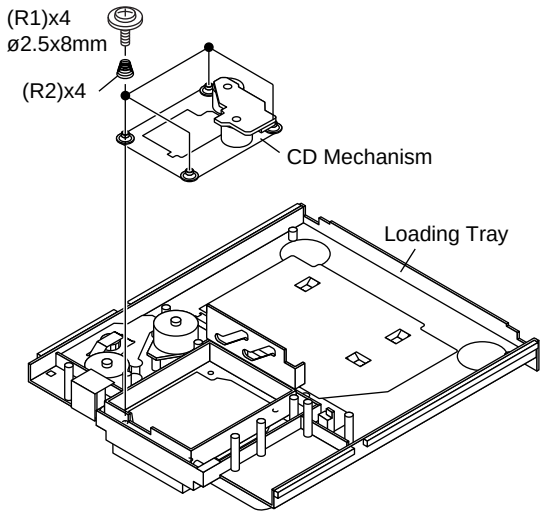



**Figure 7-4**

**CP-XP120**

This speaker CP-XP120 is available in assembles only and may not be disassembled.

# REMOVING AND REINSTALLING THE MAIN PARTS

## TAPE MECHANISM SECTION

Perform steps 1 to 6 and 9 of the disassembly method to remove the tape mechanism.

### How to remove the record/playback and erase heads (TAPE 1) (See Fig. 8-1)

1. When you remove the screws (A1) x 2 pcs., the record/playback head can be removed.
2. Move the hooks (A2) x 2 pcs., toward the center position as shown in Fig. 8-1 and then lift the erase head.

### How to remove the playback head (TAPE 2) (See Fig. 8-2)

1. When you remove the screws (B1) x 2 pcs., the playback head can be removed.

### How to remove the pinch roller (TAPE 1) (See Fig. 8-3)

1. When you remove the screw (C1) x 1 pc., the pinch roller can be removed.

**Note:**
When installing the pinch roller, pay attention to the spring mounting position.

### How to remove the pinch roller (TAPE 2) (See Fig. 8-3)

1. When you remove the screw (D1) x 1 pc., the pinch roller can be removed.

**Note:**
When installing the pinch roller, pay attention to the spring mounting position.

### How to remove the tape motor (See Fig. 8-4)

1. Remove the belt.
2. Remove the screws (E1) x 6 pcs., to remove the motor bracket.
3. Remove the screws (E2) x 3 pcs., to remove the tape motor.

### How to remove the belt (TAPE 1) (See Fig. 8-5)

1. Remove the main belt (F1) x 1 pc., from the tape motor side.
2. Remove the FF/REW belt (F2) x 1 pc.

### How to remove the belt (TAPE 2) (See Fig. 8-5)

1. Remove the main belt (G1) x 1 pc., from the tape motor side.
2. Remove the FF/REW belt (G2) x 1 pc.

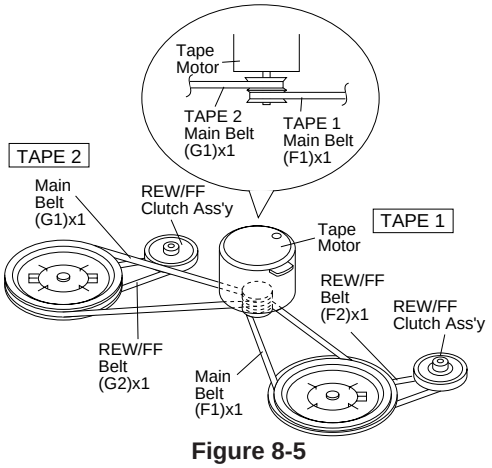



**Figure 8-5**

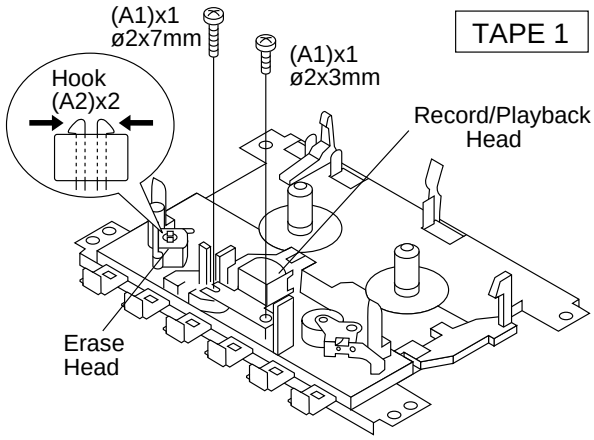



**Figure 8-1**

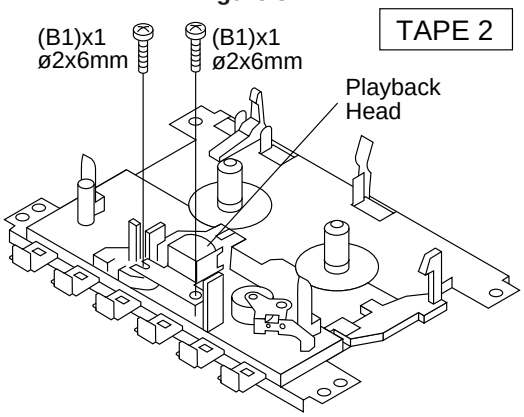



**Figure 8-2**

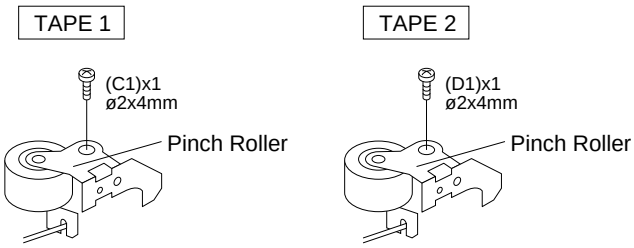
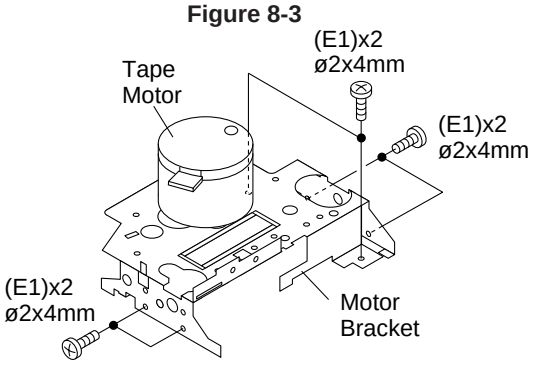



**Figure 8-3**



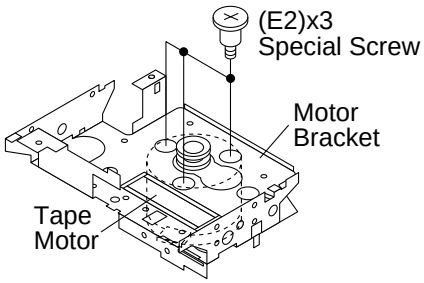




**Figure 8-4**

## CD MECHANISM SECTION

Perform steps 1, 2, 3, 12, 13, 14 and 16 of the disassembly method to remove the CD mechanism.

### How to remove the T/T up/down motor (See Figs. 9-1, 9-2)

1. Remove the screws (A1) x 4 pcs.
2. Remove the belt (A2) x 1 pc.
3. Remove the screws (A3) x 2 pcs., to remove the T/T up/down motor.

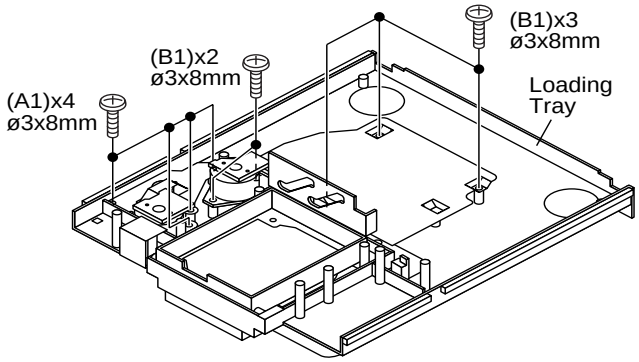



**Figure 9-1**

### How to remove the loading motor (See Figs. 9-1, 9-2)

1. Remove the screws (B1) x 5 pcs.
2. Remove the belt (B2) x 1 pc.
3. Remove the screws (B3) x 2 pcs., to remove the loading motor.

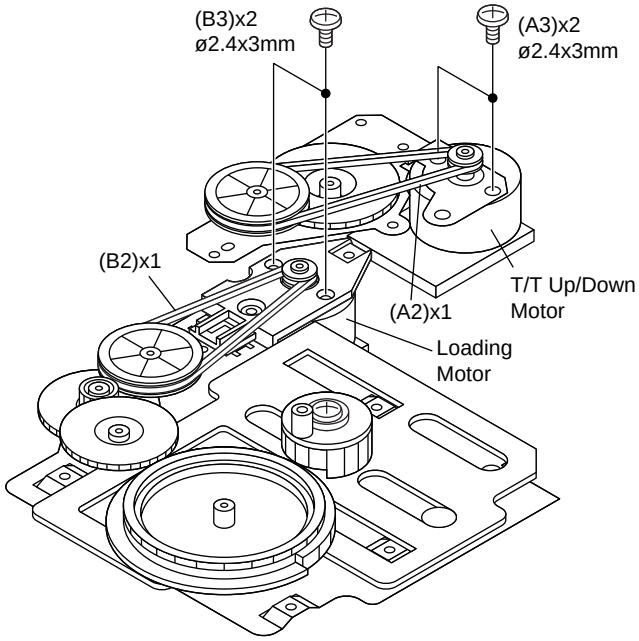



**Figure 9-2**

### How to remove the pickup (See Fig. 9-3)

1. Remove the stop washer (C1) x 1 pc., to remove the gear (C2) x 1 pc.
2. Remove the screws (C3) x 2 pcs., to remove the shaft (C4) x 1 pc.
3. Remove the pickup.

**Note**

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

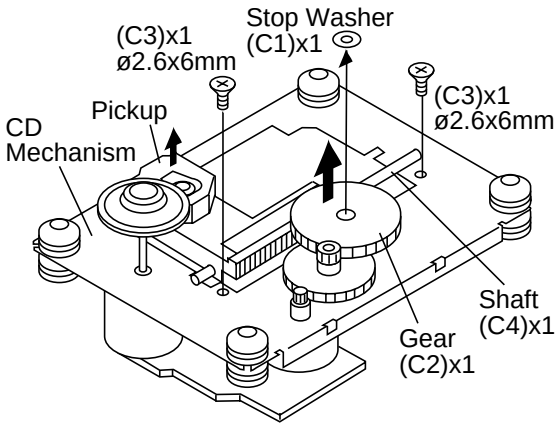



**Figure 9-3**

# ADJUSTMENT

## MECHANISM SECTION

**• Driving Force Check**

| Torque Meter | Specified Value |
|---|---|
| Play: TW-2111 | Tape 1: Over 80 g<br>Tape 2: Over 80 g |

**• Torque Check**

| Torque Meter | Specified Value | |
|---|---|---|
| | Tape 1 | Tape 2 |
| Play: TW-2111 | 30 to 80 g.cm | 30 to 80 g.cm |
| Fast forward: TW-2231 | — | 70 to 180 g.cm |
| Rewind: TW-2231 | — | 70 to 180 g.cm |

**• Tape Speed**

| | Test Tape | Adjusting Point | Specified Value | Instrument Connection |
|---|---|---|---|---|
| Tape speed | MTT-111 | Variable Resistor in motor. | 3,000 ± 30 Hz | Speaker Terminal (Load resistance: 6 ohms) |

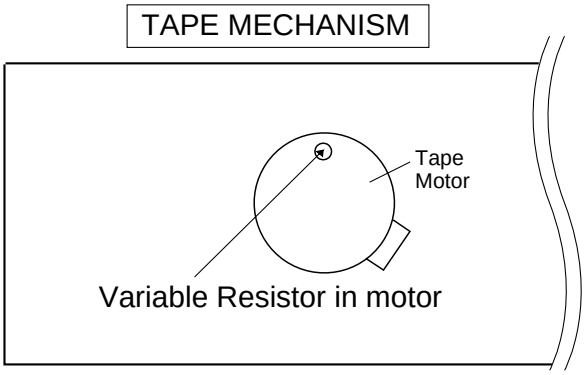



**Figure 10-1**

## TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

**• AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

| Test Stage | Frequency | Frequency Display | Setting/ Adjusting Parts | Instrument Connection |
|---|---|---|---|---|
| AM IF | 450 kHz | 1,602 kHz | T351 | *1 |
| AM Band Coverage | — | 531 kHz | (fL): T306 1.1 ± 0.1 V | *2 |
| AM Tracking | 990 kHz | 990 kHz | (fL): T302 | *1 |

*1. Input: Antenna Output: TP302
*2. Input: Antenna Output: TP301

**• FM Mute Level (FM ST MODE)**

Signal generator: 1 kHz, 40 kHz dev., FM modulated

| Frequency | Display | Adjusting Parts | Instrument Connection |
|---|---|---|---|
| 98.00 MHz (26 dBμV) | 98.00 MHz | VR351*1 | Input: CNP301 Output: Speaker Terminal |

*1. Adjust so that an output signal appears.

**• FM IF**

**Notes:**

1. Description of the "FM IF Adjustment" is not carried on this Manual. It is because the IF coil in the FM front end section has been best adjusted in the factory so that its further adjustment is not needed at the field. When replacing the FM front end assembly, no adjustment is needed either.
2. The parts in the FM front end section are prepared in a complete unit, so you can't obtain each part individually.

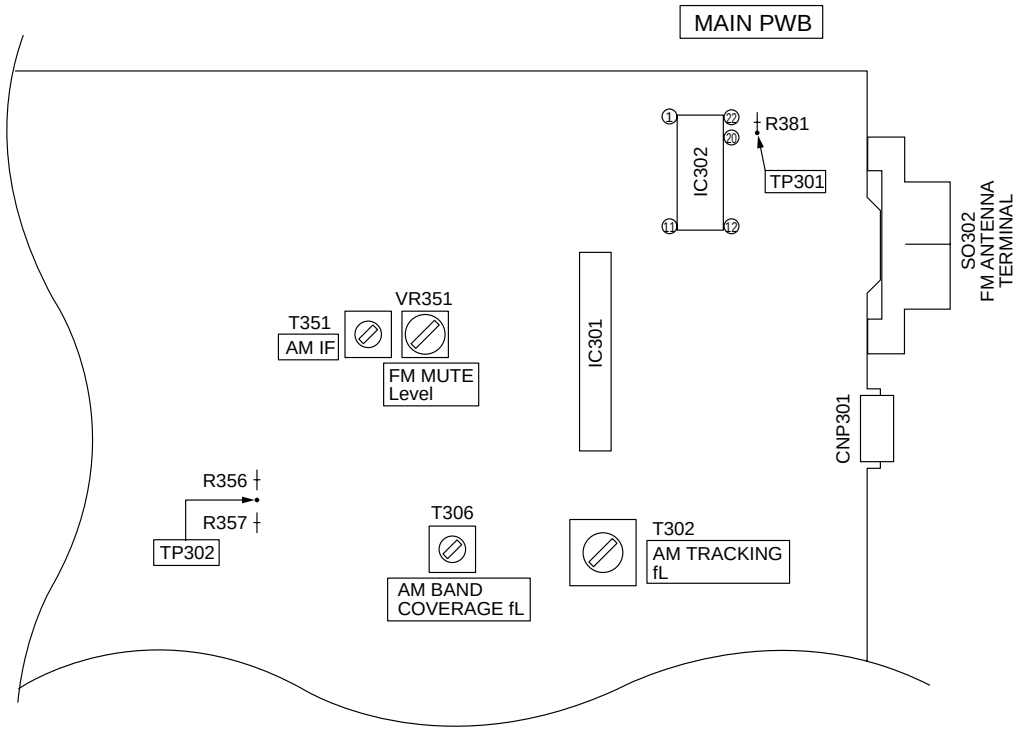



**Figure 10-2 ADJUSTMENT POINTS**

# TEST MODE

PLAY + DISC SKIP test04 TIMER ON/OFF TEST MODE

FL DISPLAY: TEST 4

STOP + DISC SKIP test05 VFD DISPLAY WINDOW TEST MODE

FL DISPLAY: VFD ALL LIGHT

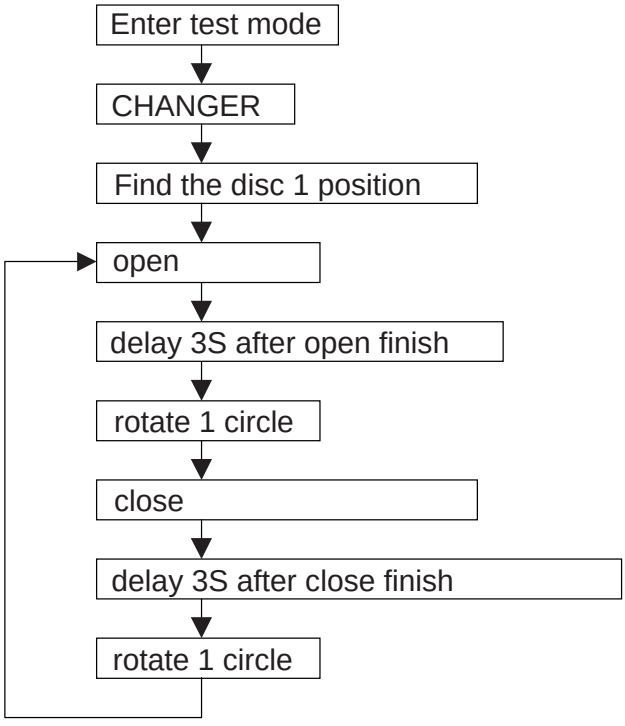
FUNCTION: TEST THE VFD DISPLAY WINDOW

PLAY + OPEN/CLOSE test08 OPEN/CLOSE & 3 DISC CHANGER AGING TEST

DISPLAY: TEST 8

FUNCTION: Enter the TEST MODE 8, MCU control the 3 DISC CHANGER OPEN/CLOSE. After open finished, tray rotate 1 circle (360 degree). Then close, After close finished, tray rotate 1 circle (360 degree) again.

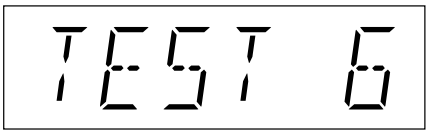
Request: Every period include 4 operation. Below is TIMING:



**CD-XP120W**

PLAY + VOLUME DOWN test06 FRONT PANEL KEY TEST

FL DISPLAY:

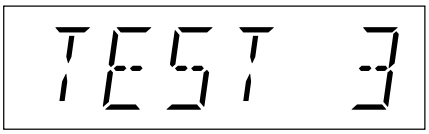



FUNCTION: FRONT PANEL KEY TEST MODE,IF ALL KEY HAVE BEEN PRESSED 1 TIME, THEN

PRESS THE "POWER" KEY, VFD DISPLAY "OK".

PLAY + VOLUME UP test03 VOLUME TEST MODE

FL DISPLAY:

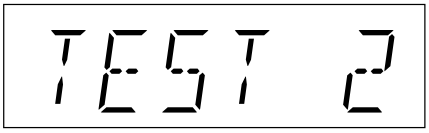



FUNCTION:

1. TEST 3 DISPLAY 1 SECOND. THEN CHANGE TO CD FUNCTION.
2. IN CD FUNCTION (Pickup IN → CHECK DISC1 SW TOC_IL → No DISC → RECEIVE OPEN/CLOSE KEY → OPEN → RECEIVE OPEN/CLOSE KEY → CLOSE)
3. Can change to other function [TAPE/TUNER] FUNCTION KEY PROCESS SAME AS NORMAL PROCESS.
4. In any function within this test mode VOLUME CONTROL HAS 3LEVEL [0/23/MAX] CANCEL VOL UP/DOWN CONTINUE PROCESS FUNCTION.

PLAY + TUNER test02 TUNER TEST MODE

FL DISPLAY




FUNCTION STORE 10 PRESET TUNER IN THE MEMORY [AM/FM ST]
FM test use the BAND key change from FM ST.

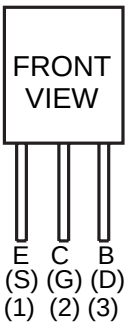
# NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     indicates AM
     indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” ( ⊏ ═ ═ ═ ⊐ ) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

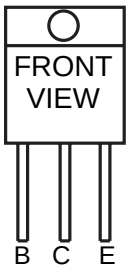
| REF. NO | DESCRIPTION | POSITION |
|---|---|---|
| SW1 | OPEN/CLOSE | ON—OFF |
| SW2 | DISC | ON—OFF |
| SW3 | UP | ON—OFF |
| SW4 | PICKUP IN | ON—OFF |
| SW5 | TAPE 1 PLAY | ON—OFF |
| SW6 | TAPE 1 FF/REW | ON—OFF |
| SW7 | TAPE 2 FF/REW | ON—OFF |
| SW8 | TAPE 2 PLAY | ON—OFF |
| SW101 | VOLTAGE SELECTOR | 110 V—127 V—220 V— 230-240 V |
| SW102 | SPAN SELECTOR | 50 kHz/9 kHz—100 kHz/10 kHz |
| SW701 | ON/STAND-BY | ON—OFF |
| SW702 | CD | ON—OFF |

| REF. NO | DESCRIPTION | POSITION |
|---|---|---|
| SW703 | TUNING UP | ON—OFF |
| SW704 | PRESET UP | ON—OFF |
| SW705 | TUNER (BAND) | ON—OFF |
| SW706 | TUNING DOWN | ON—OFF |
| SW707 | PRESET DOWN | ON—OFF |
| SW708 | EQUALIZER/X-BASS/DEMO | ON—OFF |
| SW709 | TAPE | ON—OFF |
| SW710 | STOP | ON—OFF |
| SW711 | VOLUME UP | ON—OFF |
| SW712 | DISC SKIP | ON—OFF |
| SW713 | OPEN/CLOSE | ON—OFF |
| SW714 | PLAY/REPEAT | ON—OFF |
| SW715 | VOLUME DOWN | ON—OFF |
| SW801 | REC./P.B. | ON—OFF |

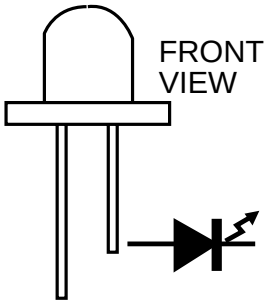
# TYPES OF TRANSISTOR




KRA102 M
KRC102 M
KRC107 M
KRC104 M
KSA1015 GR
KSA1815 GR
HSB562 C
HSC1609 GR
KSC1815 GR
KSC3203 Y
KSA1271 Y
SSC1674 C




2SD2012 Y




SD3210W

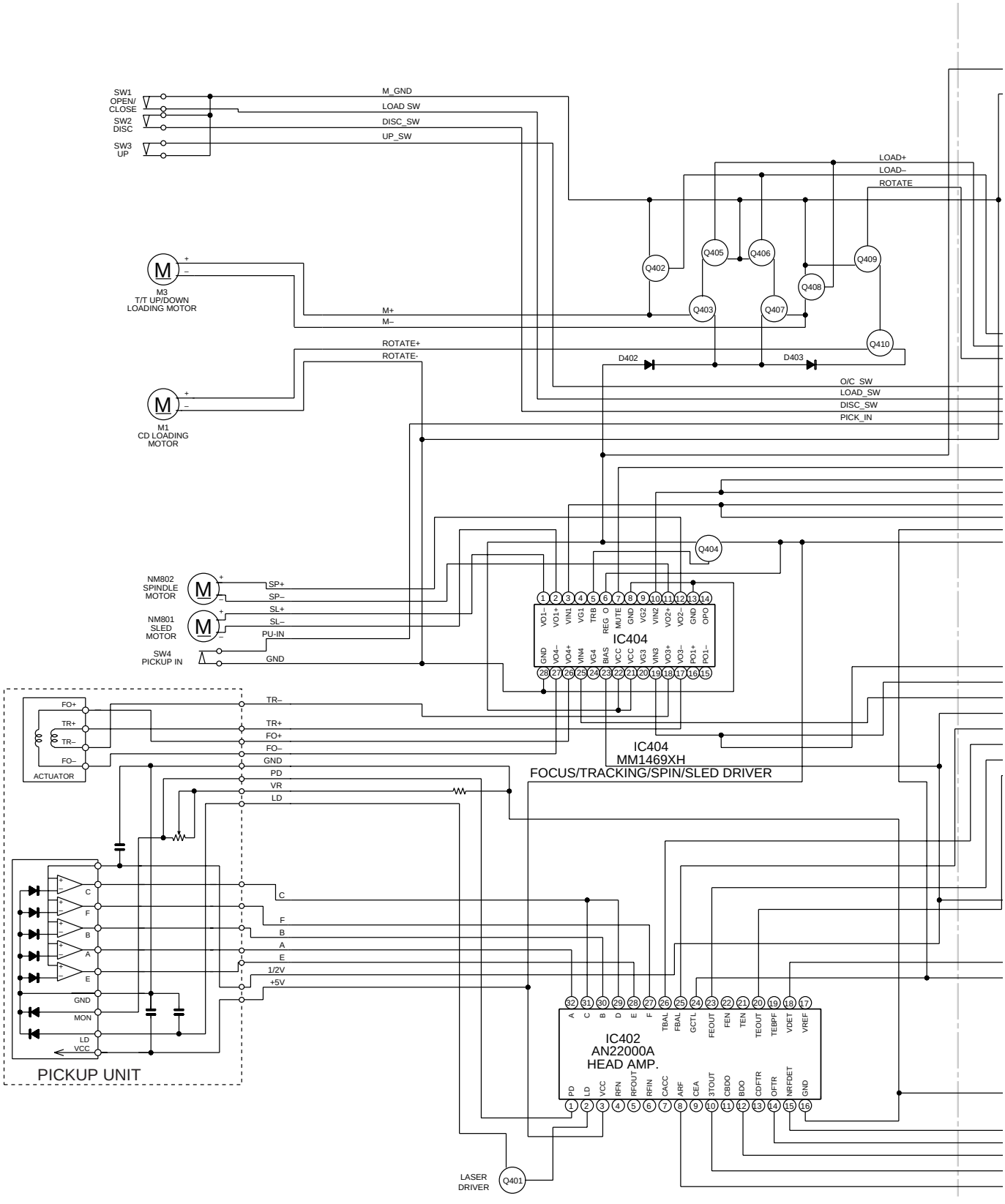



**Figure 14 BLOCK DIAGRAM (1/4)**

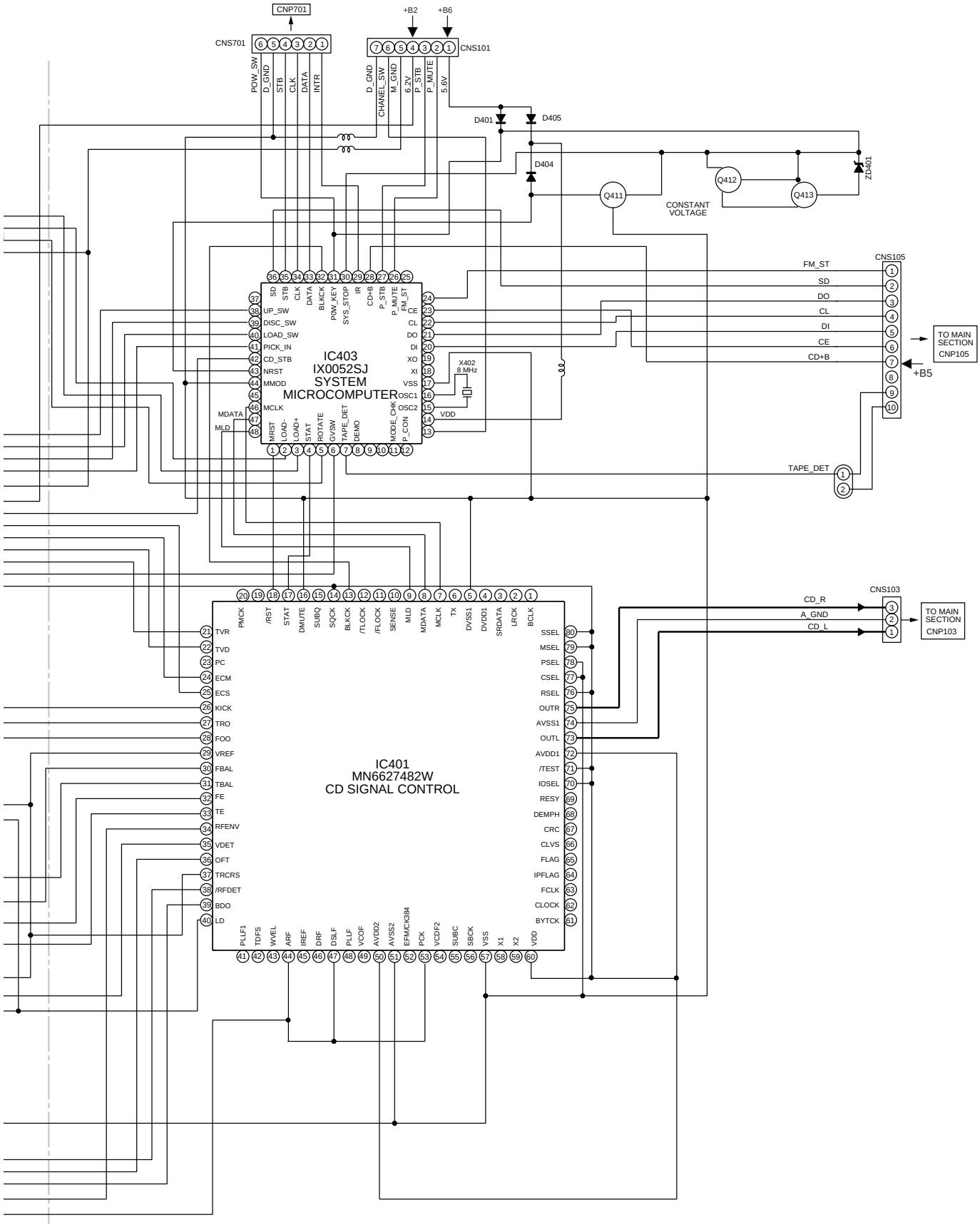



**Figure 15 BLOCK DIAGRAM (2/4)**

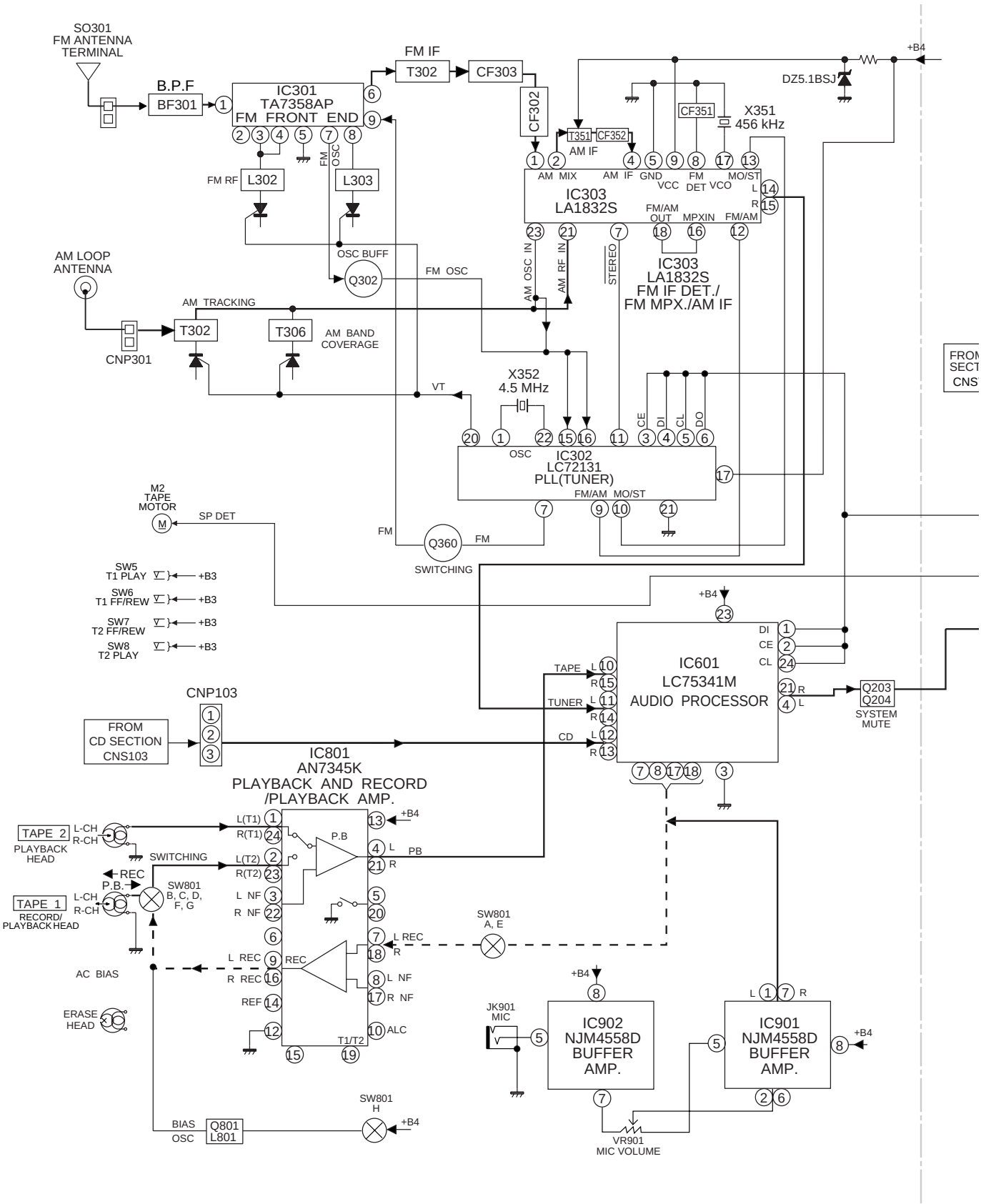



**Figure 16 BLOCK DIAGRAM (3/4)**

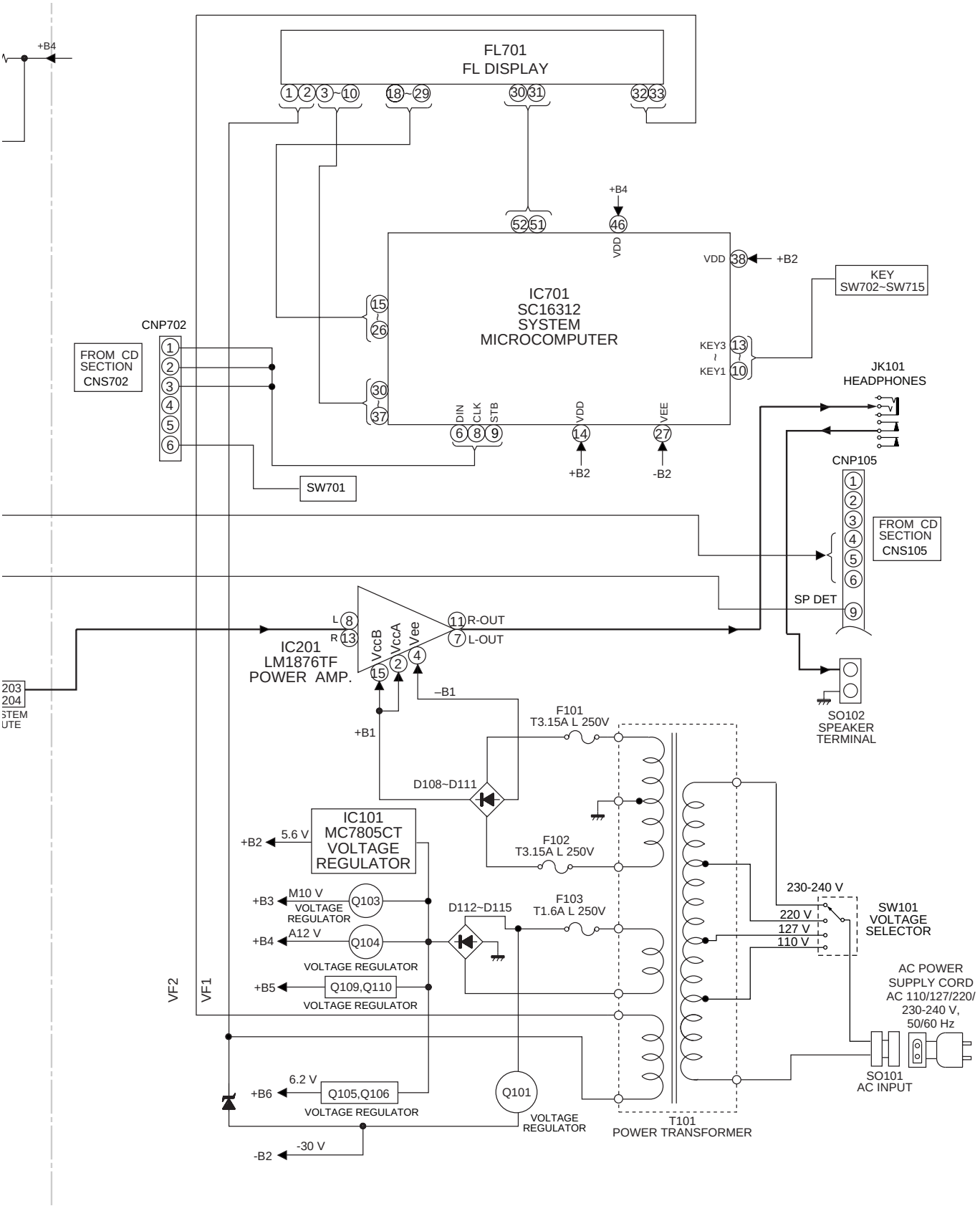
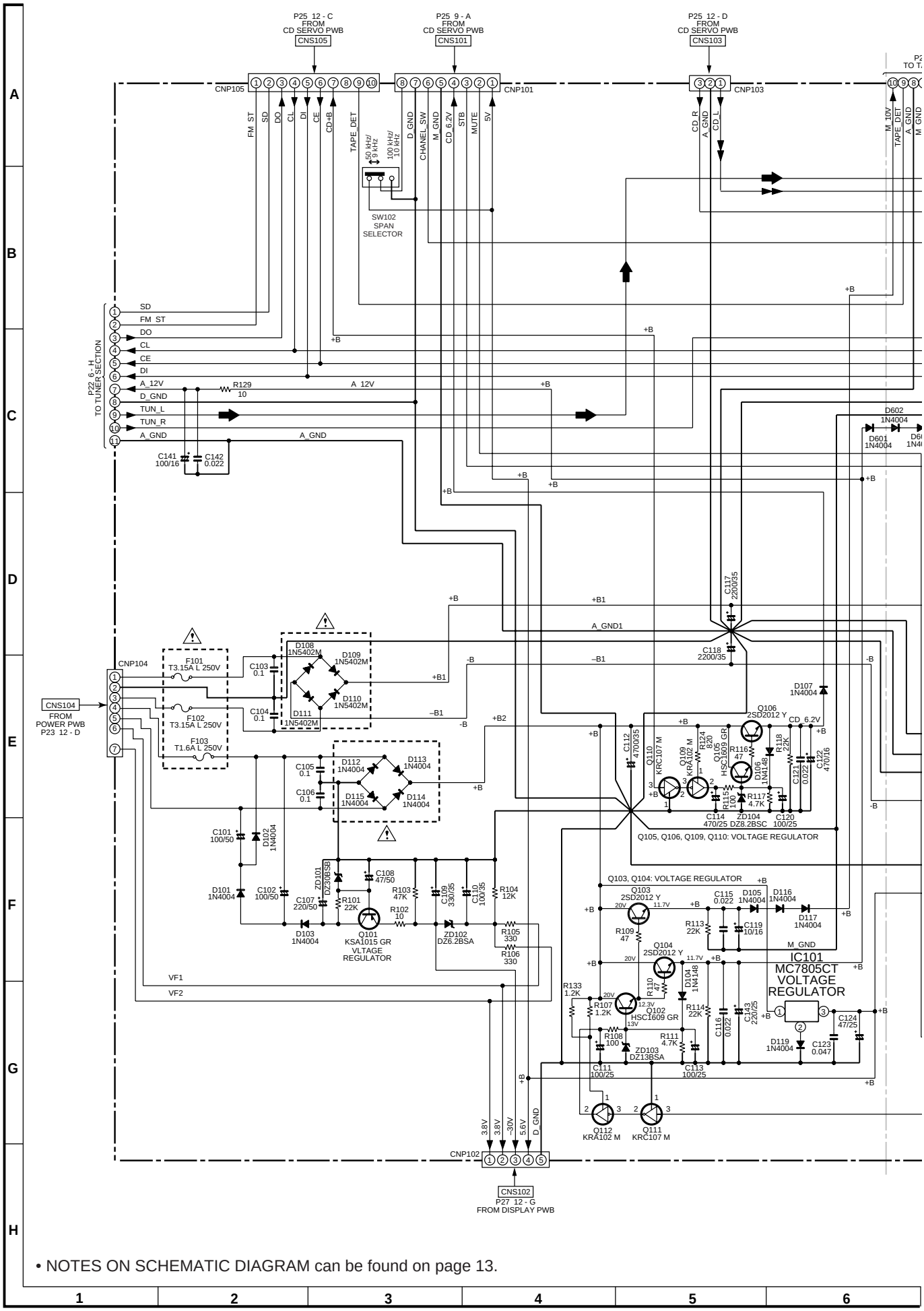
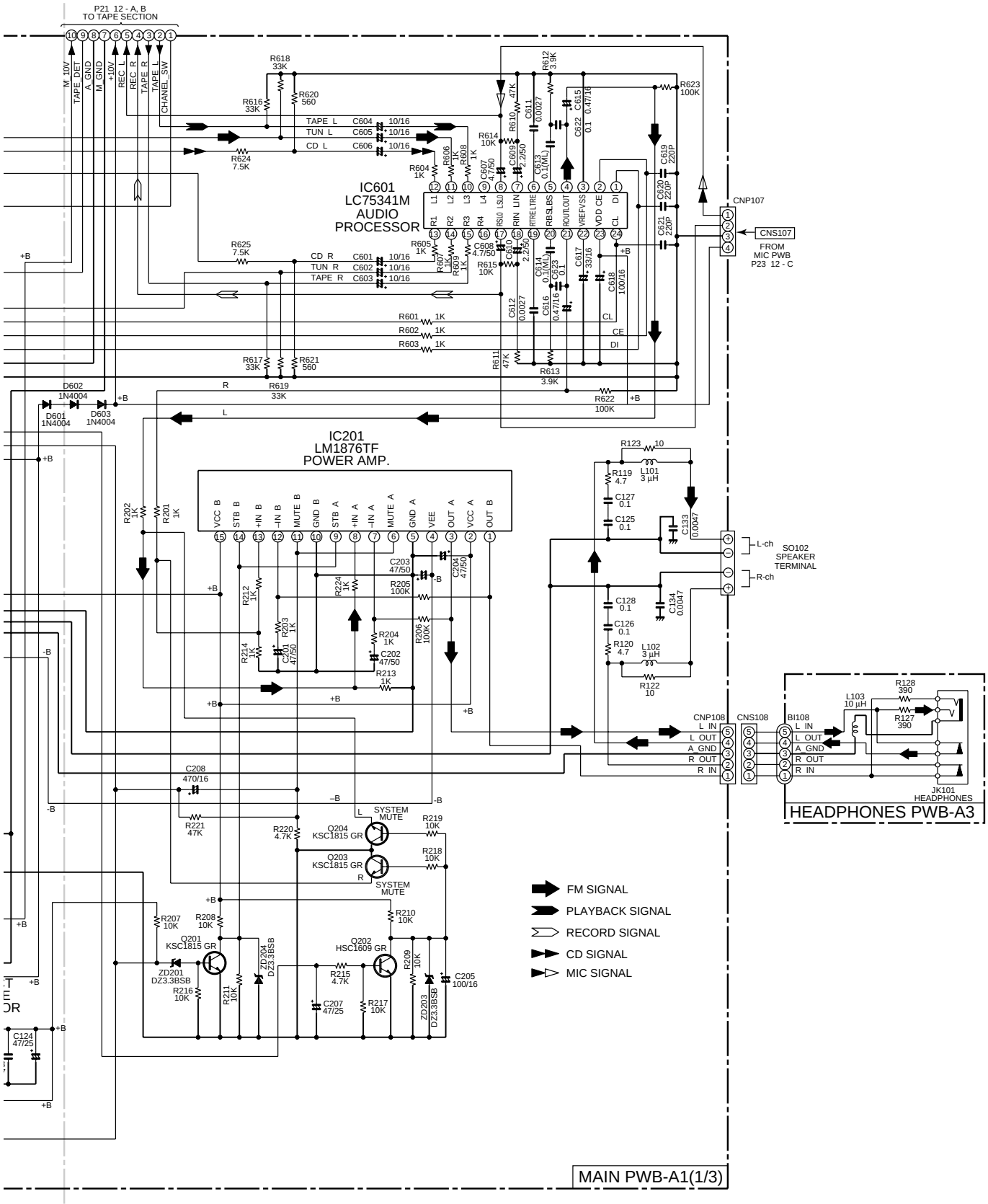



**Figure 17 BLOCK DIAGRAM (4/4)**




• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

**Figure 18 SCHEMATIC DIAGRAM (1/10)**




| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 19 SCHEMATIC DIAGRAM (2/10)**

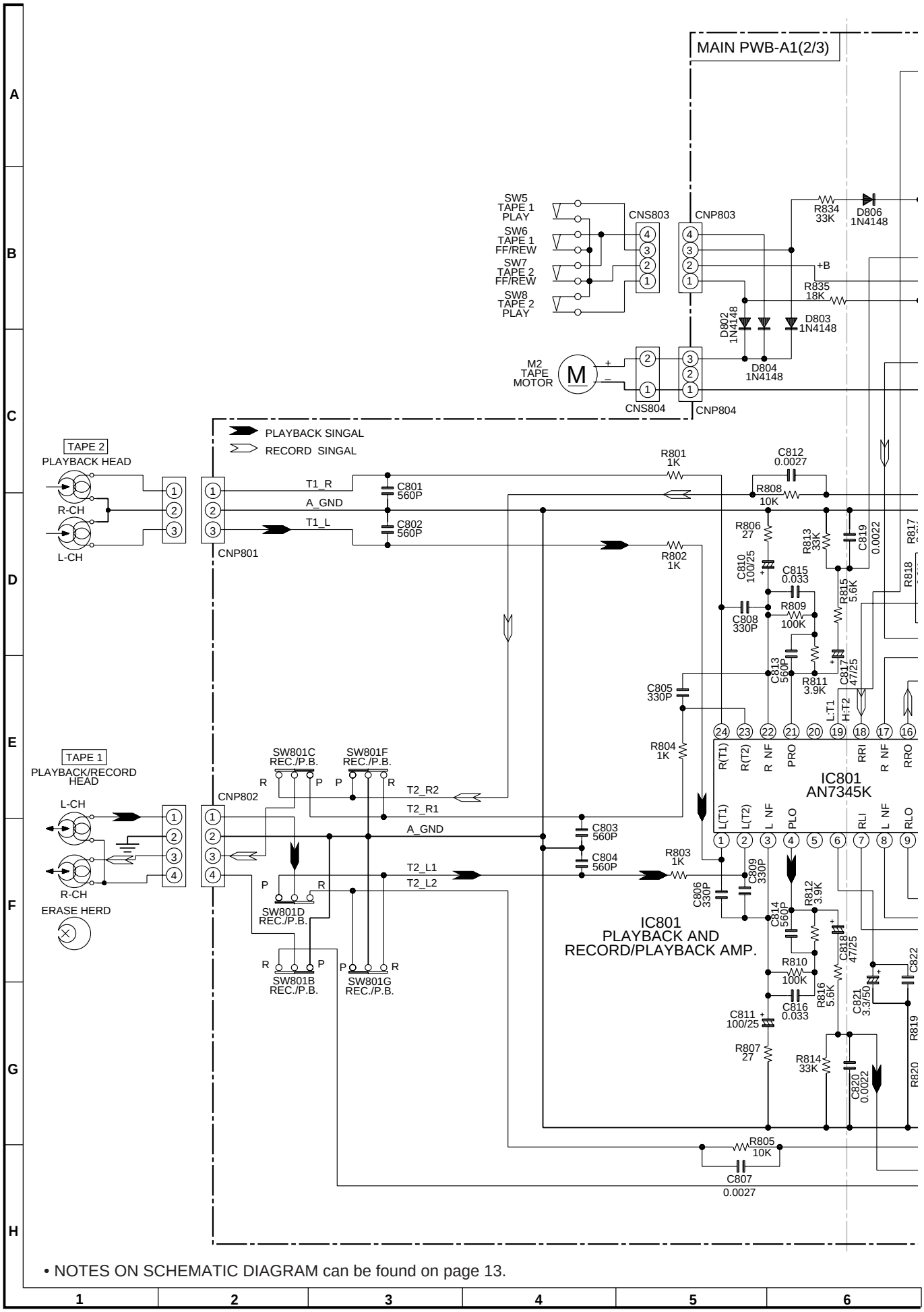
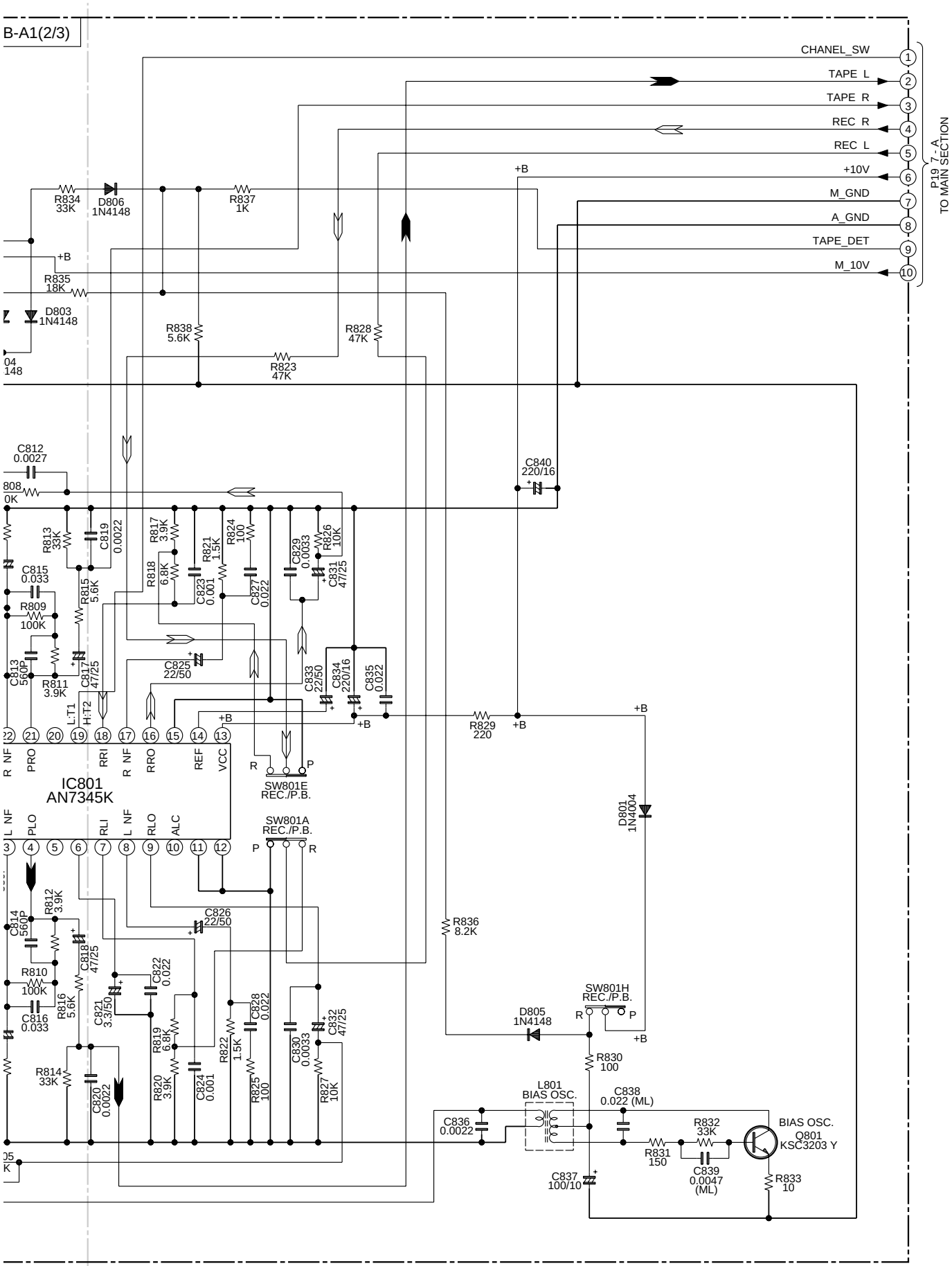



**Figure 20 SCHEMATIC DIAGRAM (3/10)**




| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 21 SCHEMATIC DIAGRAM (4/10)**

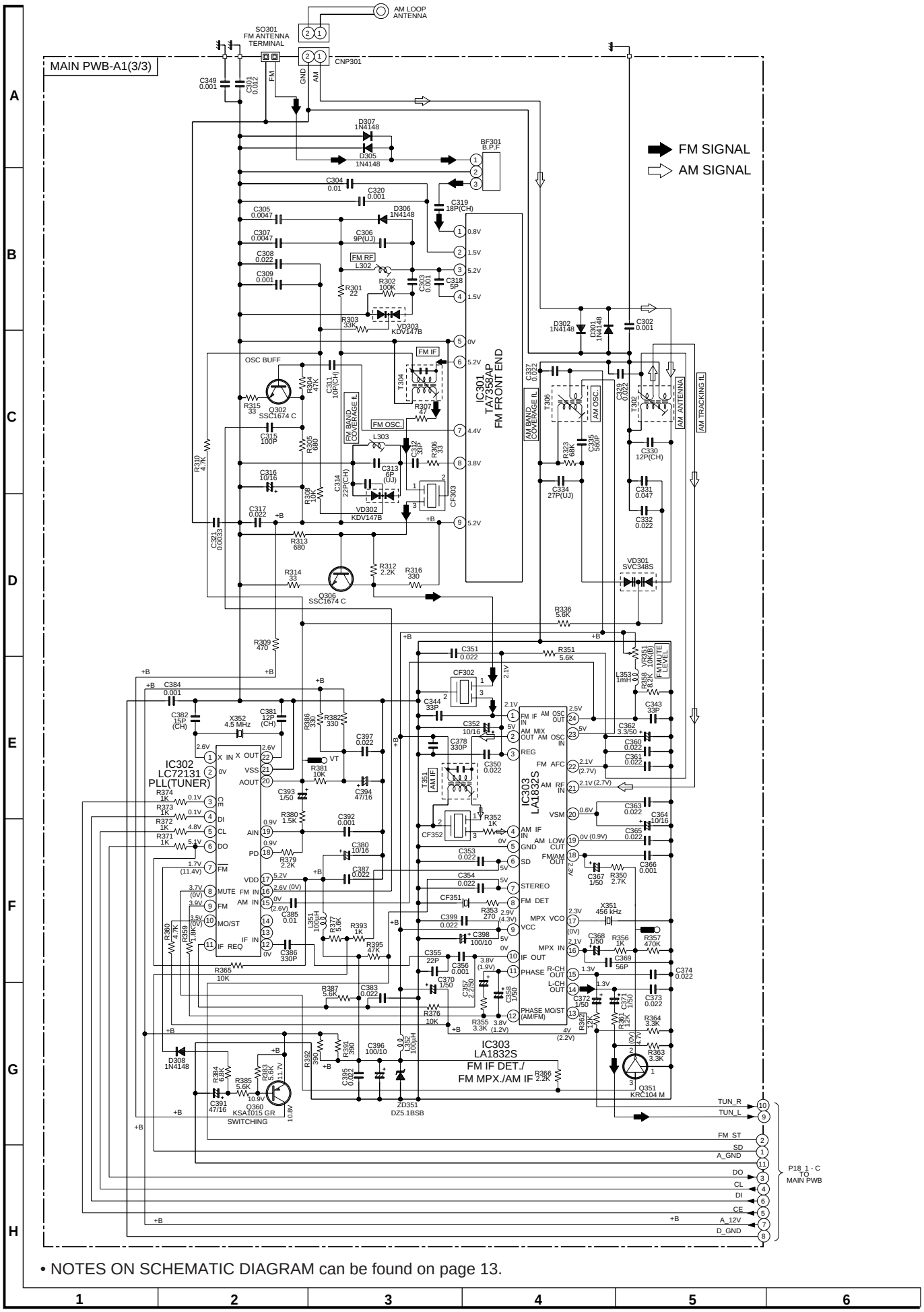
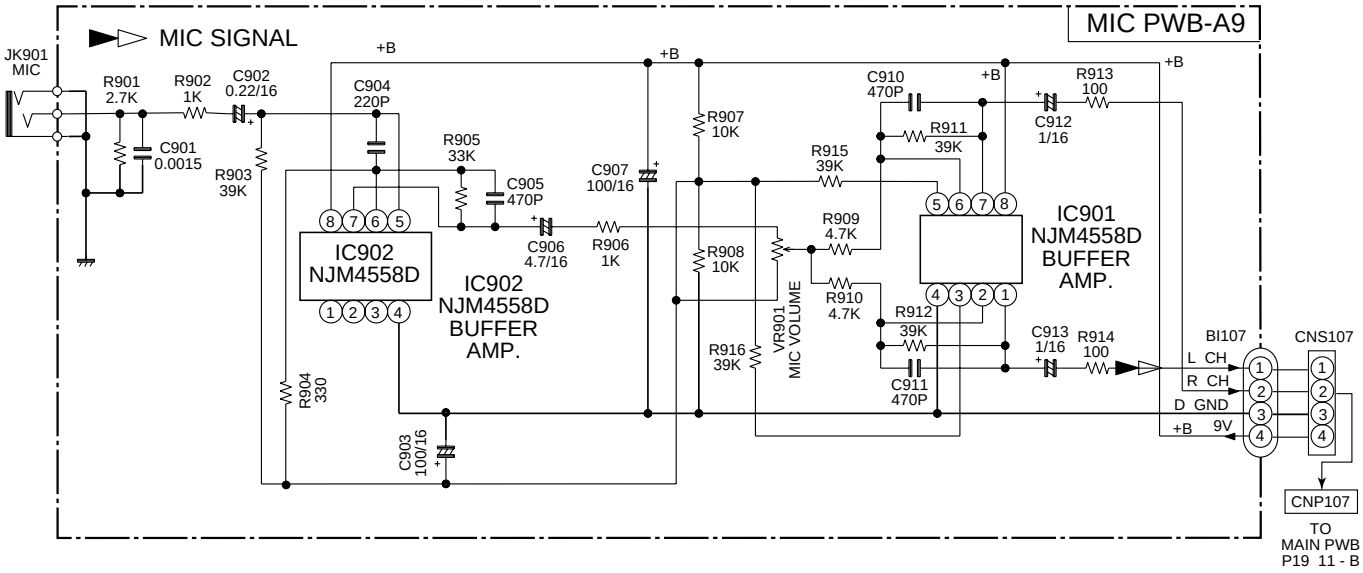
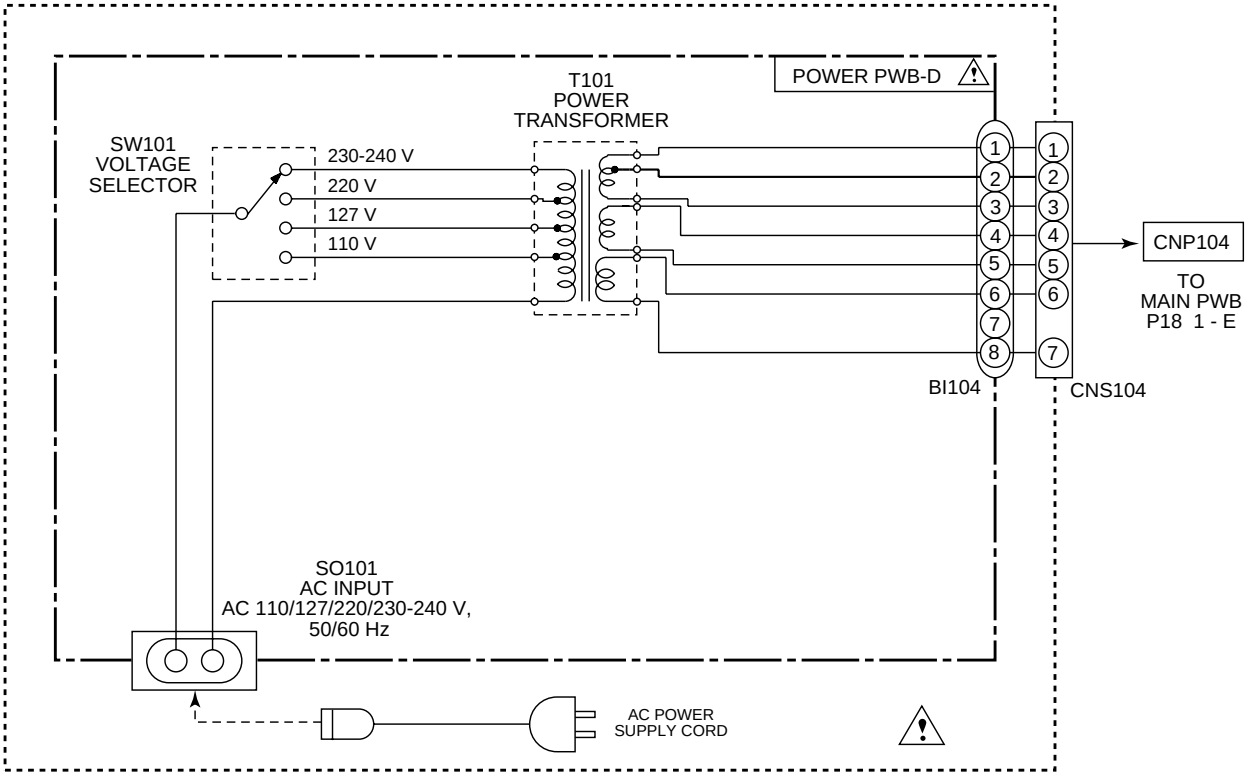


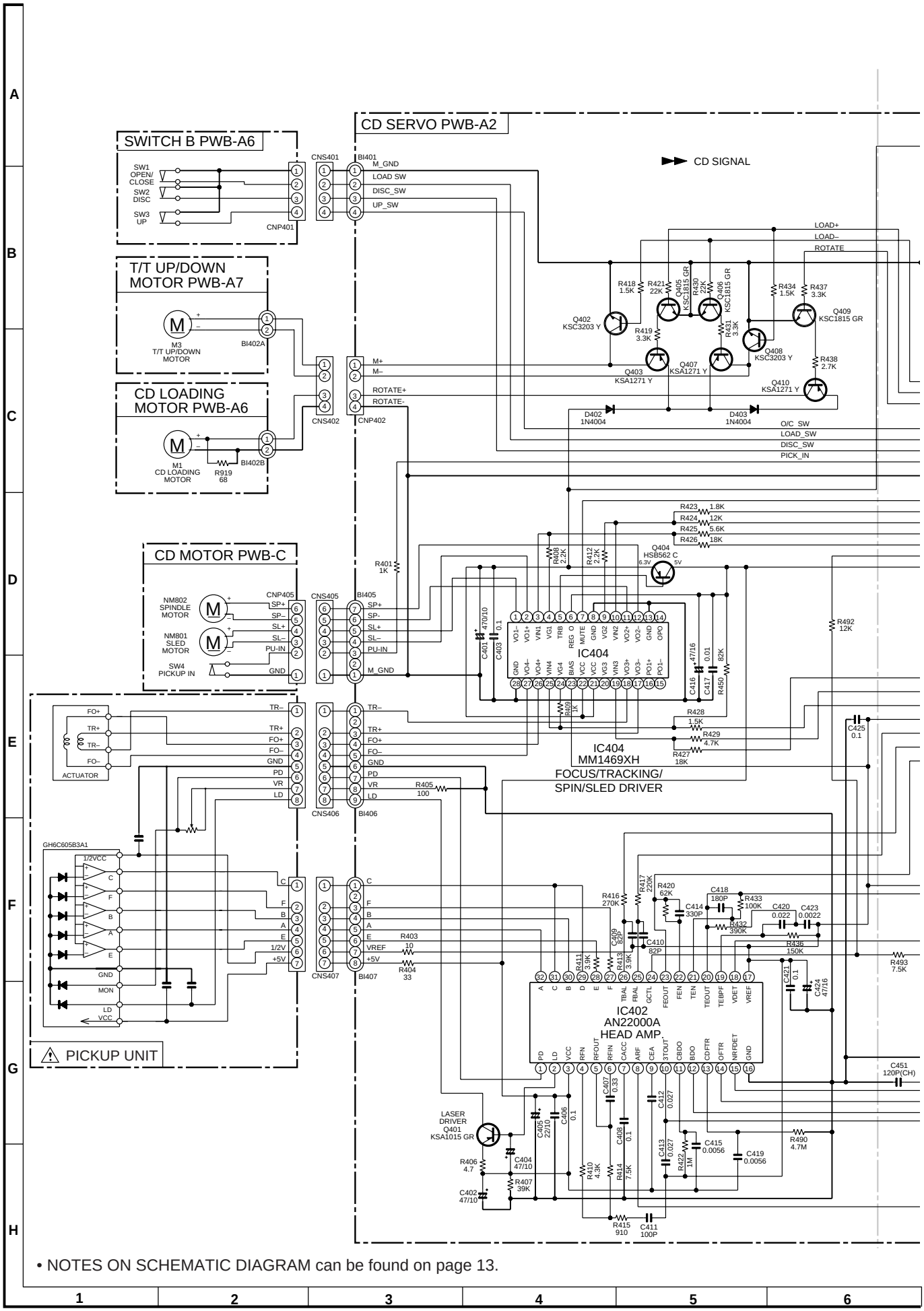

**Figure 22 SCHEMATIC DIAGRAM (5/10)**



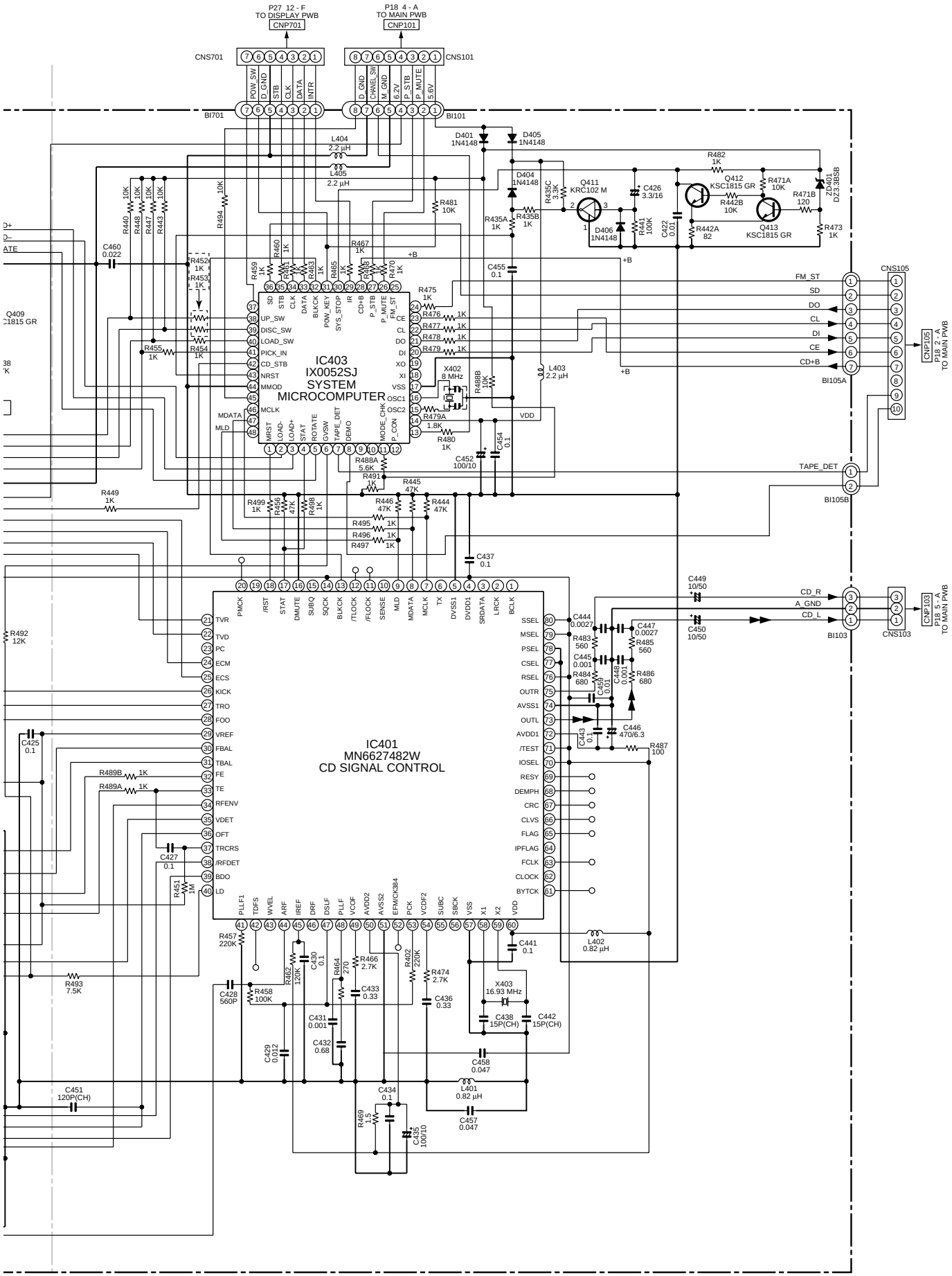

| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 23 SCHEMATIC DIAGRAM (6/10)**



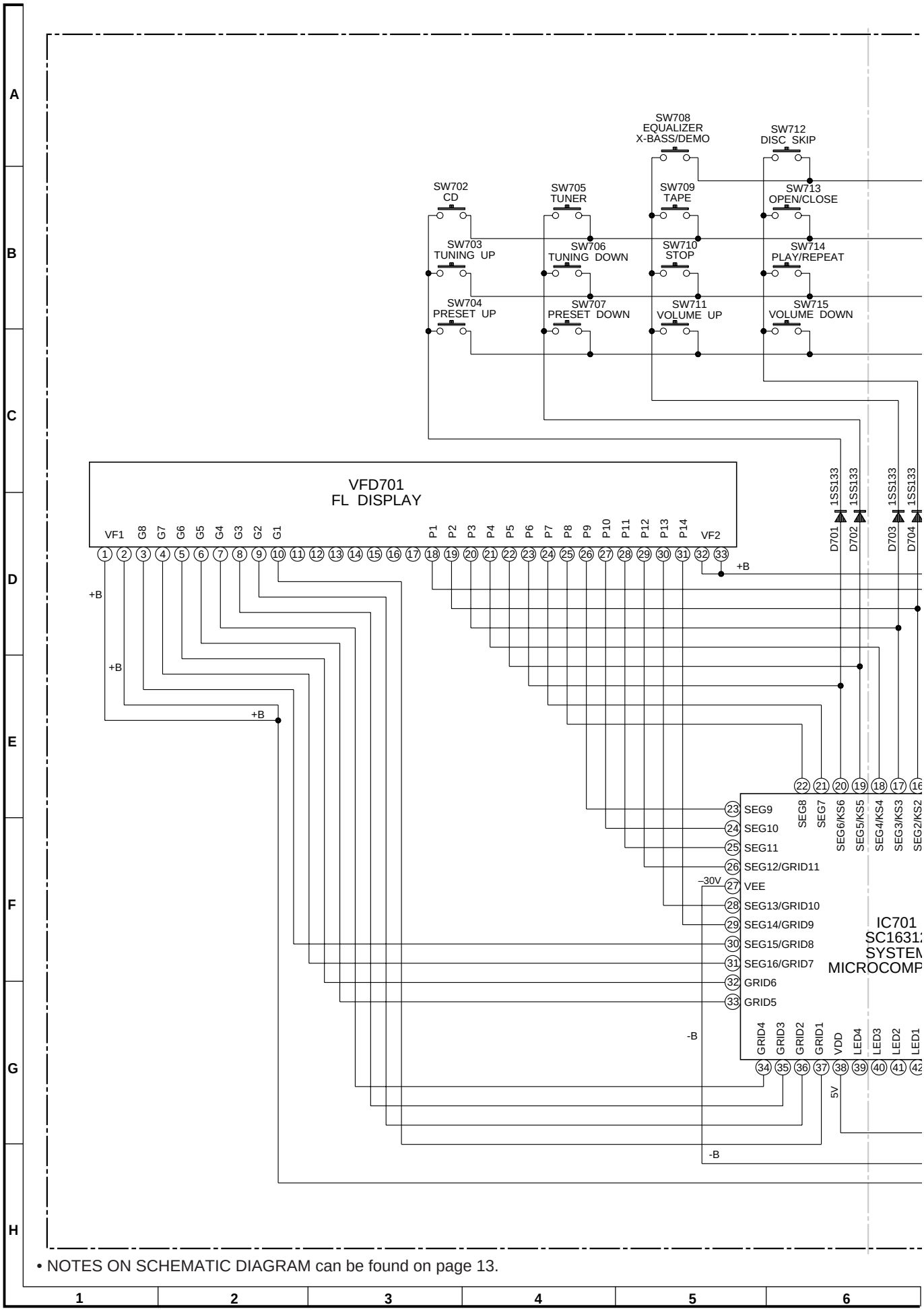

• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

**Figure 24 SCHEMATIC DIAGRAM (7/10)**



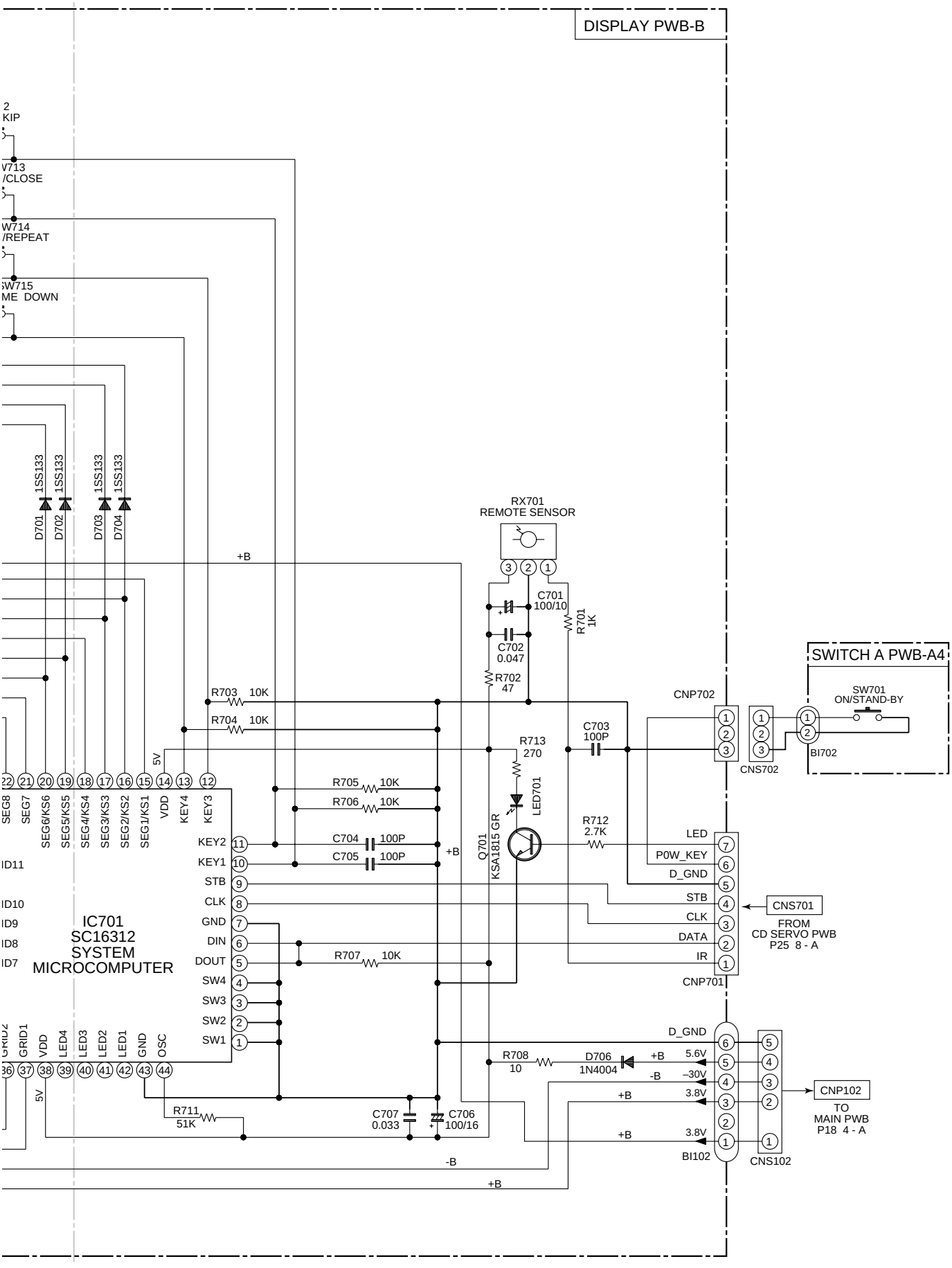

| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 25 SCHEMATIC DIAGRAM (8/10)**




• NOTES ON SCHEMATIC DIAGRAM can be found on page 13.

**Figure 26 SCHEMATIC DIAGRAM (9/10)**




| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 27 SCHEMATIC DIAGRAM (10/10)**

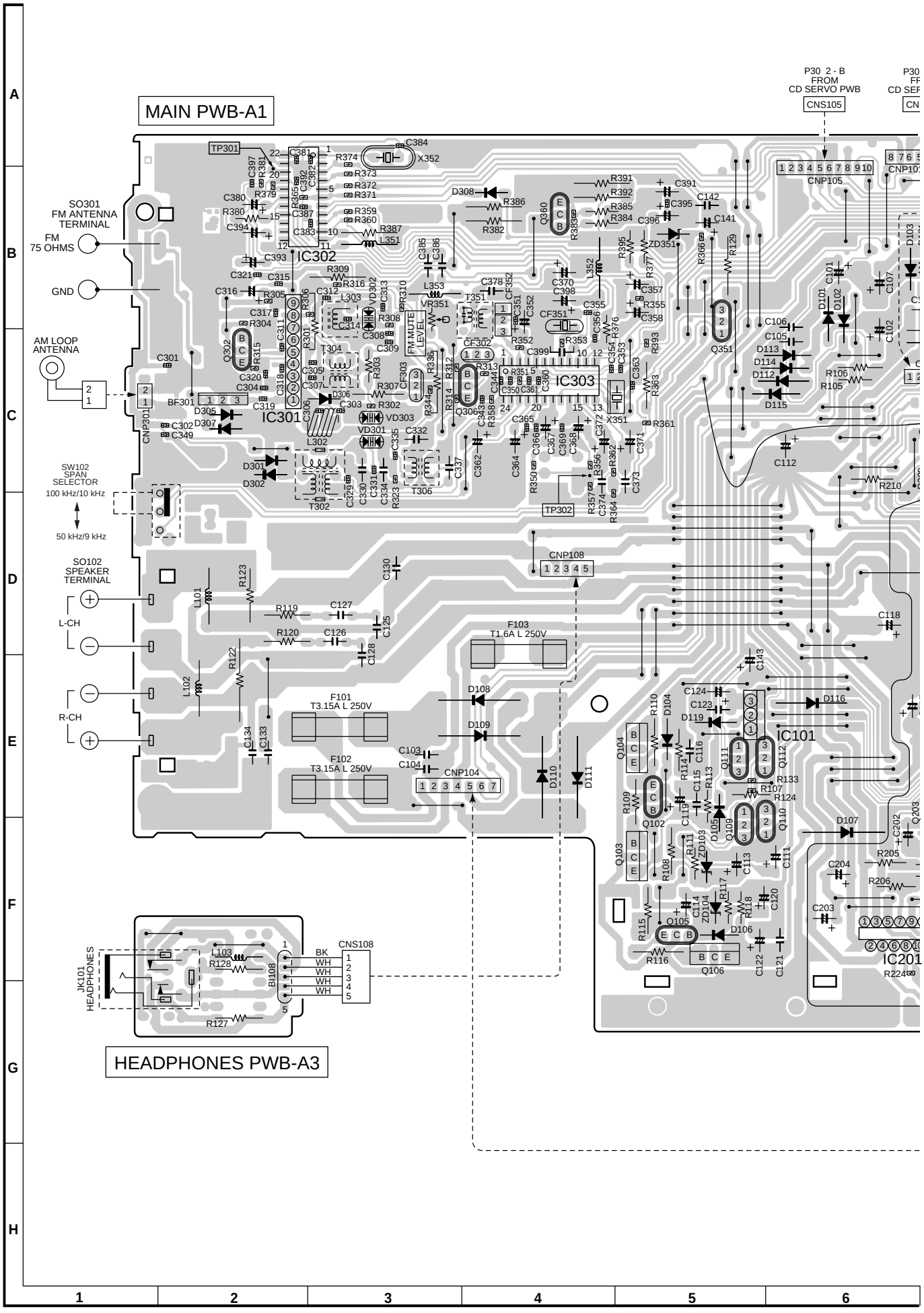
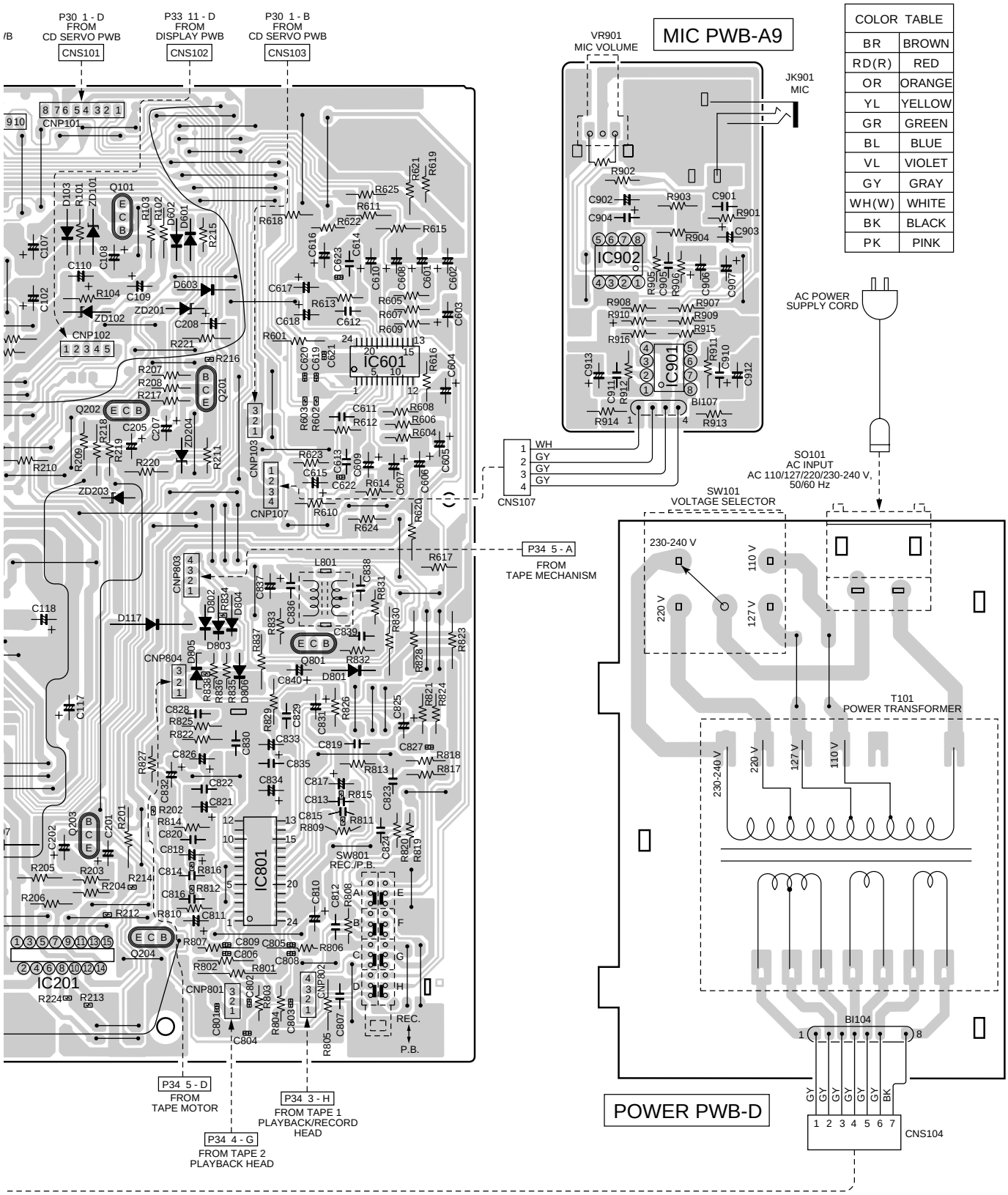



**Figure 28 WIRING SIDE OF P.W.BOARD (1/7)**




| COLOR TABLE | |
|---|---|
| BR | BROWN |
| RD(R) | RED |
| OR | ORANGE |
| YL | YELLOW |
| GR | GREEN |
| BL | BLUE |
| VL | VIOLET |
| GY | GRAY |
| WH(W) | WHITE |
| BK | BLACK |
| PK | PINK |

| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 29 WIRING SIDE OF P.W.BOARD (2/7)**

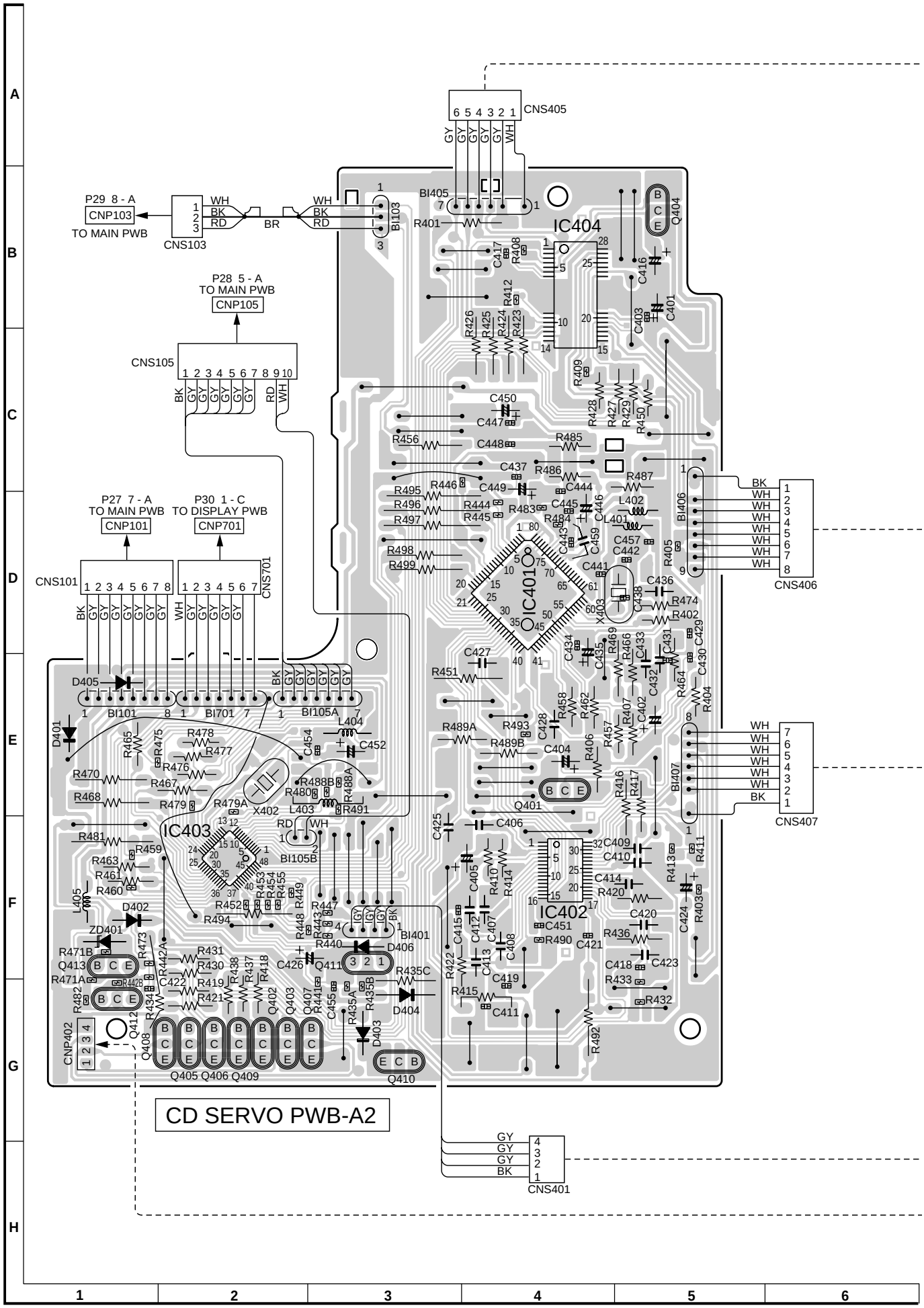
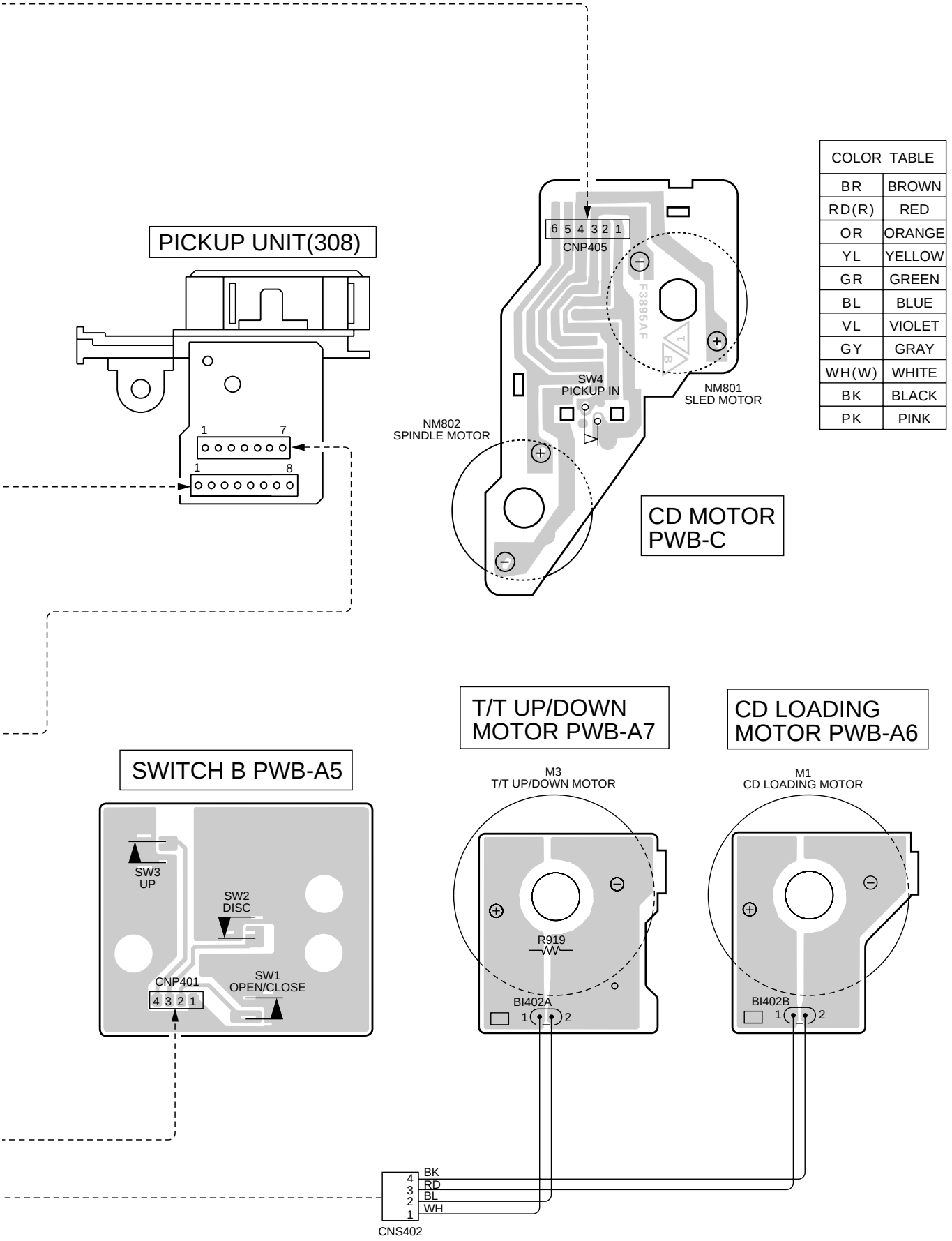



Figure 30 WIRING SIDE OF P.W.BOARD (3/7)




| 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|

**Figure 31 WIRING SIDE OF P.W.BOARD (4/7)**

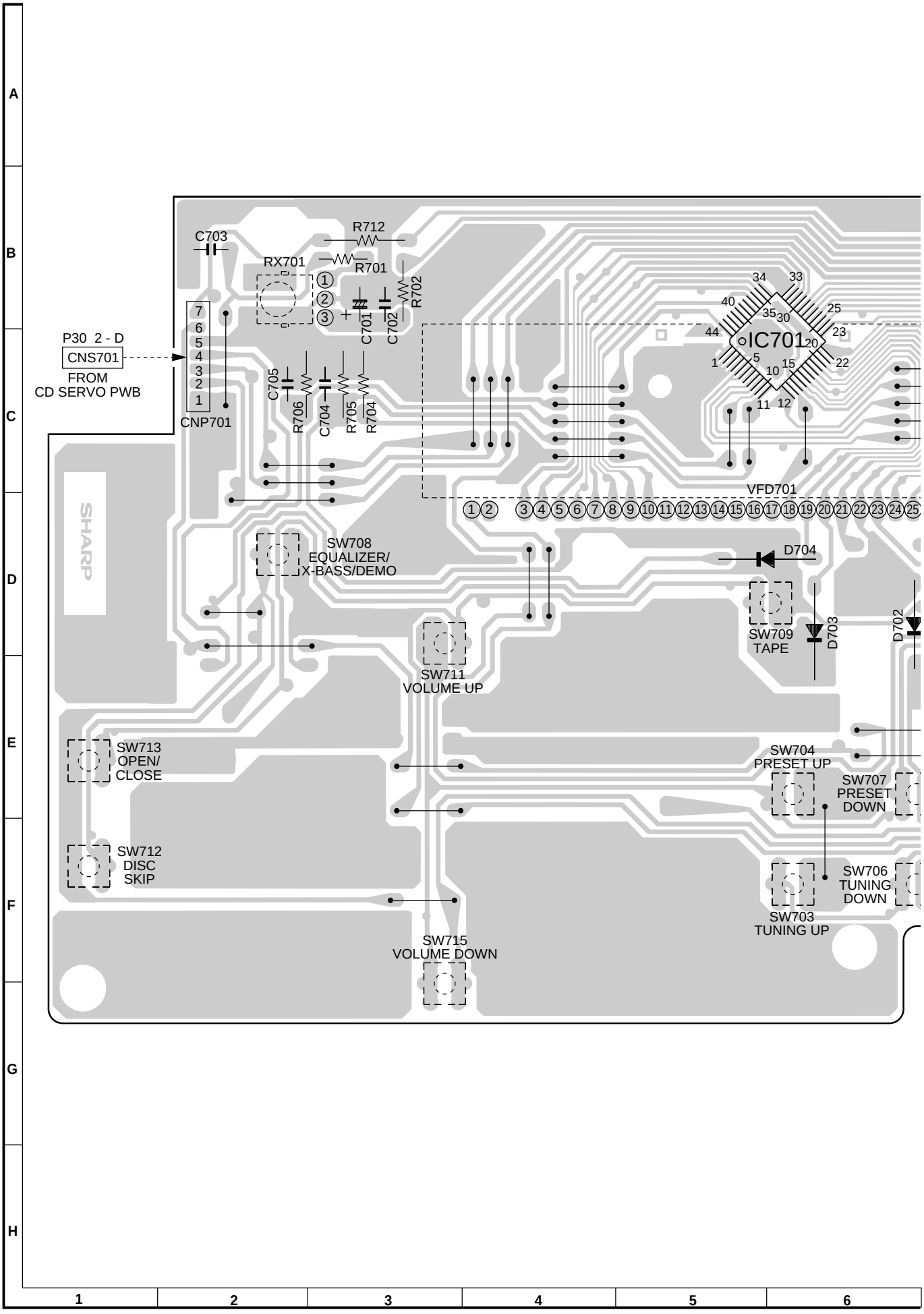



**Figure 32 WIRING SIDE OF P.W.BOARD (5/7)**

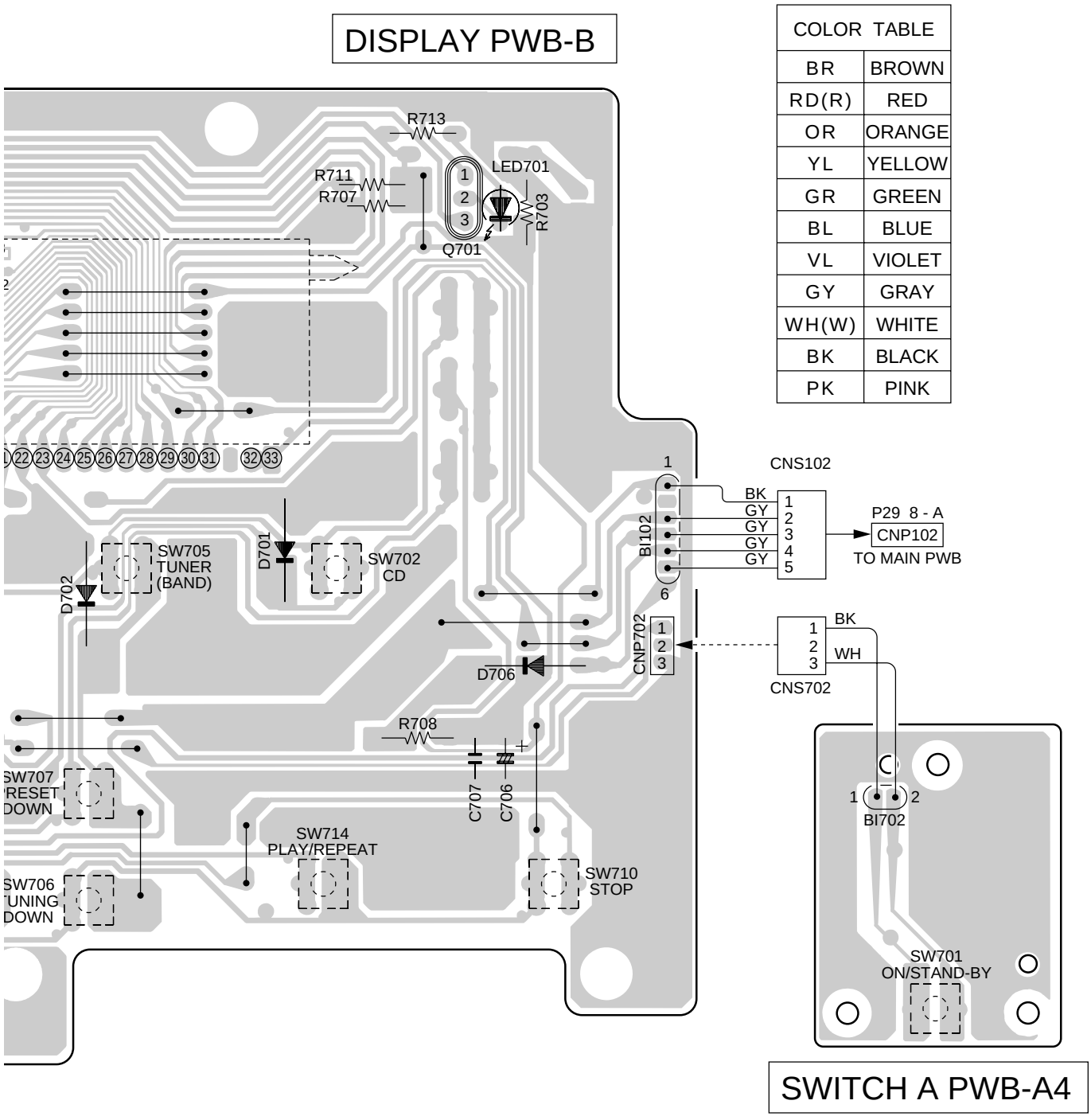
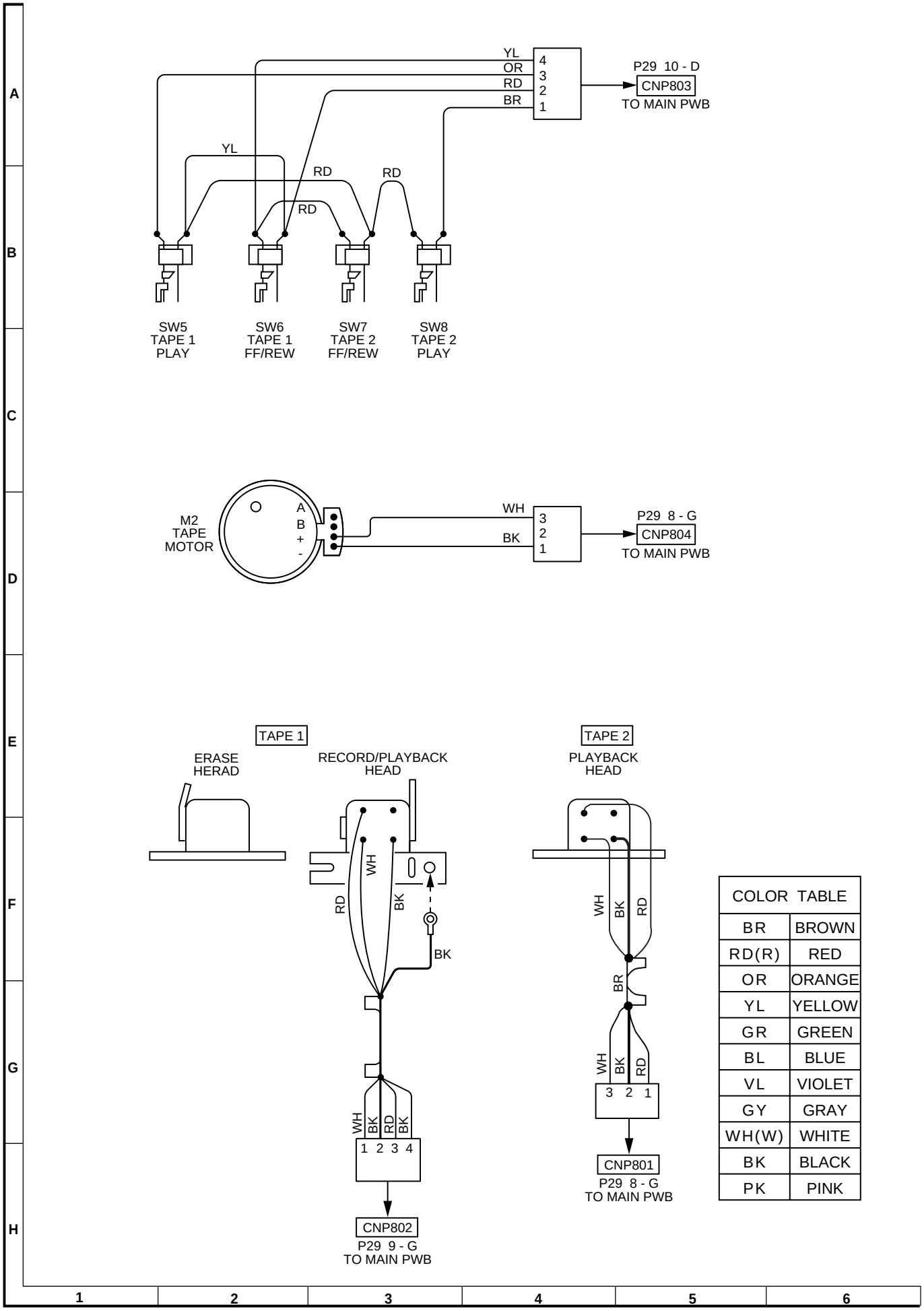





**Figure 33 WIRING SIDE OF P.W.BOARD (6/7)**




| COLOR TABLE | |
|---|---|
| BR | BROWN |
| RD(R) | RED |
| OR | ORANGE |
| YL | YELLOW |
| GR | GREEN |
| BL | BLUE |
| VL | VIOLET |
| GY | GRAY |
| WH(W) | WHITE |
| BK | BLACK |
| PK | PINK |

**Figure 34 WIRING SIDE OF P.W.BOARD (7/7)**

# VOLTAGE

| IC101 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 18 V |
| 2 | 0.6 V |
| 3 | 4.9 V |

| IC201 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 0.14 V |
| 2 | 22 V |
| 3 | 0.15 V |
| 4 | –22 V |
| 5 | 0 V |
| 6 | 0.3 V |
| 7 | 0 V |
| 8 | 0 V |
| 9 | 0 V |
| 10 | 0 V |
| 11 | 0.3 V |
| 12 | 0 V |
| 13 | 0 V |
| 14 | 0 V |
| 15 | 22 V |

| IC402 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 0 V |
| 2 | 4.2 V |
| 3 | 5.1 V |
| 4 | 2.7 V |
| 5 | 2.4 V |
| 6 | 4.3 V |
| 7 | 1.7 V |
| 8 | 2.7 V |
| 9 | 3.5 V |
| 10 | 2.7 V |
| 11 | 4 V |
| 12 | 0 V |
| 13 | 3.8 V |
| 14 | 0 V |
| 15 | 0 V |
| 16 | 0 V |
| 17 | 2.7 V |
| 18 | 0 V |
| 19 | 2.7 V |
| 20 | 2.7 V |
| 21 | 2.7 V |
| 22 | 2.7 V |
| 23 | 2.7 V |
| 24 | 3.1 V |
| 25 | 2.7 V |
| 26 | 2.7 V |
| 27 | 2.7 V |
| 28 | 2.7 V |
| 29 | 2.8 V |
| 30 | 2.8 V |
| 31 | 2.8 V |
| 32 | 2.8 V |

| IC401 | | | |
|---|---|---|---|
| PIN NO. | VOLTAGE | PIN NO. | VOLTAGE |
| 1 | 2.6 V | 41 | 0.2 V |
| 2 | 2.6 V | 42 | 2.7 V |
| 3 | 2.6 V | 43 | 0 V |
| 4 | 5.1 V | 44 | 2.7 V |
| 5 | 0 V | 45 | 1.3 V |
| 6 | 2.5 V | 46 | 0.5 V |
| 7 | 4.5 V | 47 | 2.7 V |
| 8 | 4 V | 48 | 1.6 V |
| 9 | 4.7 V | 49 | 0.3 V |
| 10 | 0 V | 50 | 5.1 V |
| 11 | 0 V | 51 | 0.3 V |
| 12 | 0 V | 52 | 2.7 V |
| 13 | 0 V | 53 | 2.7 V |
| 14 | 5.1 V | 54 | 0.2 V |
| 15 | 2.5 V | 55 | 0.3 V |
| 16 | 0.2 V | 56 | 5 V |
| 17 | 0.3 V | 57 | 0.3 V |
| 18 | 4.8 V | 58 | 2.5 V |
| 19 | 2.6 V | 59 | 2.7 V |
| 20 | 2.6 V | 60 | 5.1 V |
| 21 | 2.7 V | 61 | 4.8 V |
| 22 | 2.7 V | 62 | 0.3 V |
| 23 | 2.7 V | 63 | 0.3 V |
| 24 | 2.7 V | 64 | 0.2 V |
| 25 | 2.7 V | 65 | 0.3 V |
| 26 | 2.7 V | 66 | 5.1 V |
| 27 | 2.7 V | 67 | 5.1 V |
| 28 | 2.7 V | 68 | 0.3 V |
| 29 | 2.7 V | 69 | 5.1 V |
| 30 | 2.4 V | 70 | 5.1 V |
| 31 | 2.4 V | 71 | 5.1 V |
| 32 | 2.7 V | 72 | 4.7 V |
| 33 | 2.7 V | 73 | 2.4 V |
| 34 | 2.7 V | 74 | 0.3 V |
| 35 | 0.3 V | 75 | 2.4 V |
| 36 | 0.3 V | 76 | 5.1 V |
| 37 | 2.3 V | 77 | 0.2 V |
| 38 | 0.3 V | 78 | 0.2 V |
| 39 | 0.3 V | 79 | 5.1 V |
| 40 | 5 V | 80 | 5.1 V |

| Q101 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | –27 V |
| C | –28 V |
| B | –23 V |

| Q102 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 12 V |
| C | 18 V |
| B | 12.5 V |

| Q103 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 11.4 V |
| C | 18.6 V |
| B | 12 V |

| Q104 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 11.3 V |
| C | 18.5 V |
| B | 12 V |

| Q105 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 7.9 V |
| C | 18.5 V |
| B | 9.3 V |

| Q106 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 6.8 V |
| C | 18.5 V |
| B | 7.9 V |

| IC403 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 4.8 V |
| 2 | 0 V |
| 3 | 0 V |
| 4 | 0 V |
| 5 | 0 V |
| 6 | 0 V |
| 7 | 0 V |
| 8 | 5 V |
| 9 | 0 V |
| 10 | 0 V |
| 11 | 1.79 V |
| 12 | 4.8 V |
| 13 | 0 V |
| 14 | 4.8 V |
| 15 | 2.4 V |
| 16 | 2.3 V |
| 17 | 0 V |
| 18 | 2 V |
| 19 | 2.4 V |
| 20 | 4.8 V |
| 21 | 4.8 V |
| 22 | 4.8 V |
| 23 | 0 V |
| 24 | 5 V |
| 25 | 4.9 V |
| 26 | 2.4 V |
| 27 | 4.6 V |
| 28 | 4.6 V |
| 29 | 4.8 V |
| 30 | 4.8 V |
| 31 | 4.8 V |
| 32 | 0 V |
| 33 | 4.8 V |
| 34 | 4.8 V |
| 35 | 4.8 V |
| 36 | 5.1 V |
| 37 | 4.9 V |
| 38 | 0 V |
| 39 | 0 V |
| 40 | 0 V |
| 41 | 4.8 V |
| 42 | 4.8 V |
| 43 | 4.8 V |
| 44 | 0 V |
| 45 | 0.2 V |
| 46 | 4.6 V |
| 47 | 4.1 V |
| 48 | 4.8 V |

| IC404 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 2.7 V |
| 2 | 2.7 V |
| 3 | 2.7 V |
| 4 | 2.7 V |
| 5 | 5.2 V |
| 6 | 5.2 V |
| 7 | 4.7 V |
| 8 | 0 V |
| 9 | 2.7 V |
| 10 | 2.7 V |
| 11 | 2.4 V |
| 12 | 2.9 V |
| 13 | 0 V |
| 14 | 2.9 V |
| 15 | 0 V |
| 16 | 5.6 V |
| 17 | 2.7 V |
| 18 | 2.7 V |
| 19 | 2.7 V |
| 20 | 2.7 V |
| 21 | 6 V |
| 22 | 6 V |
| 23 | 2.7 V |
| 24 | 2.7 V |
| 25 | 2.7 V |
| 26 | 3 V |
| 27 | 2.5 V |
| 28 | 0 V |
| 29 | 2.7 V |
| 30 | 2.9 V |
| 31 | 2.4 V |
| 32 | 0 V |

| IC601 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 4.8 V |
| 2 | 0 V |
| 3 | 0 V |
| 4 | 4.8 V |
| 5 | 4.8 V |
| 6 | 4.8 V |
| 7 | 4.8 V |
| 8 | 4.8 V |
| 9 | 4.8 V |
| 10 | 4.8 V |
| 11 | 4.8 V |
| 12 | 4.8 V |
| 13 | 4.8 V |
| 14 | 4.8 V |
| 15 | 4.8 V |
| 16 | 4.8 V |
| 17 | 4.8 V |
| 18 | 4.8 V |
| 19 | 4.8 V |
| 20 | 4.8 V |
| 21 | 4.8 V |
| 22 | 4.8 V |
| 23 | 9.4 V |
| 24 | 4.8 V |

| IC701 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 0 V |
| 2 | 0 V |
| 3 | 0 V |
| 4 | 0 V |
| 5 | 4.4 V |
| 6 | 4.4 V |
| 7 | 0 V |
| 8 | 4.5 V |
| 9 | 4.8 V |
| 10 | 0 V |
| 11 | 0 V |
| 12 | 0 V |
| 13 | 0 V |
| 14 | 5.2 V |
| 15 | 3.5 V |
| 16 | 8.3 V |
| 17 | 13.2 V |
| 18 | 16.2 V |
| 19 | 16.2 V |
| 20 | 13.2 V |
| 21 | 17.6 V |
| 22 | –27 V |
| 23 | –25 V |
| 24 | –27 V |
| 25 | 15.2 V |
| 26 | 7.2 V |
| 27 | –28 V |
| 28 | 12.5 V |
| 29 | 7.2 V |
| 30 | 4.4 V |
| 31 | 3.8 V |
| 32 | 7.2 V |
| 33 | 7.2 V |
| 34 | 4.3 V |
| 35 | 7.2 V |
| 36 | 7.2 V |
| 37 | 7.2 V |
| 38 | 4.7 V |
| 39 | 4.8 V |
| 40 | 4.8 V |
| 41 | 4.8 V |
| 42 | 4.8 V |
| 43 | 0 V |
| 44 | 2.6 V |

| Q109 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 9.4 V |
| C | 9.4 V |
| B | 0 V |

| Q110 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 4.8 V |

| IC801 | |
|---|---|
| PIN NO. | VOLTAGE |
| 1 | 0 V |
| 2 | 1.5 V |
| 3 | 1.5 V |
| 4 | 1.8 V |
| 5 | 0.8 V |
| 6 | 0 V |
| 7 | 0 V |
| 8 | 0.6 V |
| 9 | 3 V |
| 10 | 3 V |
| 11 | 0 V |
| 12 | 0 V |
| 13 | 6.2 V |
| 14 | 3.8 V |
| 15 | 0 V |
| 16 | 3 V |
| 17 | 0.6 V |
| 18 | 0 V |
| 19 | 0 V |
| 20 | 1 V |
| 21 | 1.8 V |
| 22 | 0.6 V |
| 23 | 0 V |
| 24 | 0 V |

| Q111 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 4.3 V |

| Q112 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 9.4 V |
| C | 9.4 V |
| B | 0 V |

| Q201 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 0.7 V |

| Q202 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 0.7 V |

| Q203 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 0.6 V |

| Q204 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 0.6 V |

| Q351 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 4.7 V (0 V) |
| B | 3.7 V (0 V) |

| Q401 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 5 V |
| C | 2.1 V |
| B | 4.2 V |

| Q402 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0.3 V |
| B | 0 V |

| Q403 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 5.7 V |
| C | 0 V |
| B | 5.3 V |

| Q404 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 6.3 V |
| C | 5.2 V |
| B | 5.2 V |

| Q405 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 5.3 V |
| B | 0 V |

| Q406 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 5.3 V |
| B | 0 V |

| Q407 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 6 V |
| C | 3 V |
| B | 5.5 V |

| Q408 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0.3 V |
| B | 0 V |

| Q412 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 4.8 V |
| B | 0 V |

| Q413 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0 V |
| C | 0 V |
| B | 1.1 V |

| Q801 | |
|---|---|
| PIN NO. | VOLTAGE |
| E | 0.26 V |
| C | 4.92 V |
| B | 0.94 V |

# FUNCTION TABLE OF IC

## IC402 VHiAN22000A-1: Head Amp. (AN22000A)

| Pin No. | Terminal Name | Function |
|---|---|---|
| 1 | PD | APC amp input. |
| 2 | LD | APC amp output. |
| 3 | VCC | Power supply. |
| 4 | RFN | RF amp inverting input. |
| 5 | RFOUT | RF addition amp output. |
| 6 | RFIN | AGC amp input. |
| 7 | CAGC | AGC loop filter connection. |
| 8 | ARF | AGC output. |
| 9 | CEA | Capacitor for HPF-amp connection. |
| 10 | 3TOUT | 3T-ENV output. |
| 11 | CBDO | Capacitor for RF dark-side envelope detection connection. |
| 12 | BDO | BDO output. |
| 13 | COFTR | Capacitor for RF bright-side envelope detection connection. |
| 14 | OFTR | OFTR output. |
| 15 | NRFDET | NRFDET output. |
| 16 | GND | Ground |
| 17 | VREF | VREF output. |
| 18 | VDET | VDET output. |
| 19 | TEBPF | VDET input. |
| 20 | TEOUT | TE amp output. |
| 21 | TEN | TE amp inverting input. |
| 22 | FEN | FE amp inverting input. |
| 23 | FEOUT | FE amp output. |
| 24 | GCTL | Gain & APC control. |
| 25 | FBAL | FBAL control. |
| 26 | TBAL | TBAL control. |
| 27 | E | Tracking signal input 1. |
| 28 | F | Tracking signal input 2. |
| 29 | D | Focus signal input 4. |
| 30 | B | Focus signal input 2. |
| 31 | C | Focus signal input 3. |
| 32 | A | Focus signal input 1. |

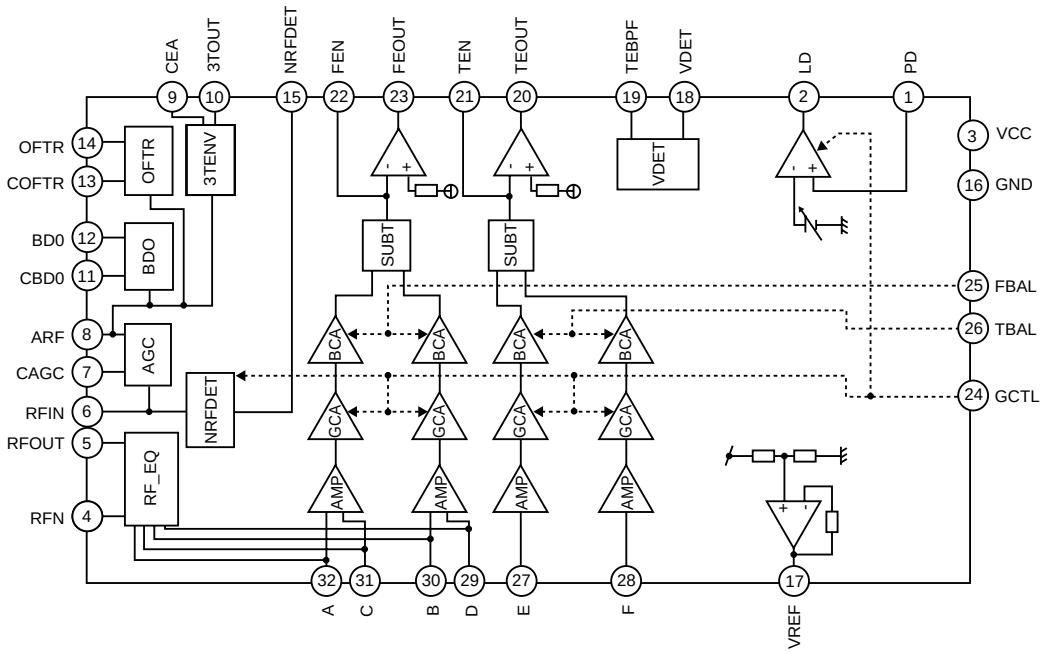



**Figure 36 BLOCK DIAGRAM OF IC**

## IC401 VHiMN6627482W: CD Signal Control (MN6627482W) (1/2)

| Pin No. | Terminal Name | Input/Output | Function |
|---|---|---|---|
| 1* | BCLK | Output | SRDATA bit clock output. |
| 2* | LRCK | Output | L/R identification signal output. |
| 3* | SRDATA | Output | Serial data output. |
| 4 | DVDD1 | Input | Digital circuit power supply. |
| 5 | DVSS1 | Input | Digital circuit GND. |
| 6* | TX | Output | Digital audio interface output signal. |
| 7 | MCLK | Input | Microcomputer command clock signal input. (Data latch at the rising edge.) |
| 8 | MDATA | Input | Microcomputer command data input. |
| 9 | MLD | Input | Microcomputer command load signal input. L: Load |
| 10* | SENSE | Output | Sense signal output. (OFT, FESL, NACEND, NAJEND, SFG) |
| 11* | /FLOCK | Output | Focus servo lead-in signal. (L: Lead-in) |
| 12* | /TLOCK | Output | Tracking servo lead-in signal. (L: Lead-in) |
| 13 | BLKCK | Output | Subcode block clock signal. (fBLKCK=75 Hz) |
| 14 | SQCK, GIO0 | Input | Default: external clock input for subcode Q resistor.<br>Command execution: general purpose I/O port.<br>CD-TEXT mode 2: TEXT data read clock input. |
| 15* | SUBQ | Output | Subcode Q data output.<br>CD-TEXT mode 2: TEEXT data output. |
| 16 | DMUTE | Input | Muting input. (Effective only at bit rate 64fs output.) H: Mute |
| 17 | STAT | Output | Status signal. (CRC, STCNT, CLVS, TTSTOP, JCLVS, SQOK, FLAG6, SENE, FLOCK, TLOCK, revolving speed data, FCLV, SUBQ, SYFLG)<br>CD-TEXT mode 3: subcode Q and TEXT data output. |
| 18 | /RST | Input | Reset input (L: Reset) |
| 19* | SMCK | Output | MSEL=H: 8.4672 MHz clock signal output.<br>MSEL=L: 4.2336 MHz clock signal output. |
| 20* | PMCK, PLAY | Output | Default: 88.2 kHz clock signal output.<br>Command execution: Play signal output. H: play |
| 21 | TRV | Output | Traverse forcing transmission output. 3-State |
| 22 | TVD | Output | Traverse drive output. |
| 23* | PC | Output | Spindle motor ON output. L: ON (Default) |
| 24 | ECM | Output | Spindle motor drive signal. (Forcing mode output.) 3-State |
| 25 | ECS | Output | Spindle motor drive signal. (Servo error signal output.) |
| 26 | KICK | Output | Kick pulse output. 3-State |
| 27 | TRD | Output | Tracking drive output. |
| 28 | FOD | Output | Focus drive output. |
| 29 | VREF | Input | DA output section (TVD, ECS, TRD, FOD, FBAL, TBAL, TOFS) reference voltage. |
| 30 | FBAL | Output | Focus balance adjustment output. |
| 31 | TBAL | Output | Tracking balance adjustment output. |
| 32 | FE | Input | Focus error signal input. (Analog input) |
| 33 | TE | Input | Tracking error signal input. (Analog input) |
| 34 | RFENV | Input | RF envelope signal input. (Analog input) |
| 35 | VDET | Input | Oscillation detection signal input. H: Detection |
| 36 | OFT | Input | Off track signal input. H: Off track |
| 37 | TRCRS | Input | Track cross signal input. (Analog input) |
| 38 | /RFDET | Input | RF detection signal input. L: Detection |
| 39 | BDO | Input | Drop out signal input. H: Drop out |
| 40 | LDON | Output | Laser ON signal output. H: ON |
| 41 | PLLF2 | Input/Output | Loop filter characteristic switch terminal for PLL. |
| 42* | TOFS | Output | Tracking offset adjustment output. (Shared with general purpose DA output terminal.) |
| 43* | WVEL | Output | Double-speed status signal output. H: Double-speed |
| 44 | ARF | Input | RF signal input. |
| 45 | IREF | Input | Reference current input terminal |
| 46* | DRF | Input | DSL bias terminal. |

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

## IC401 VHiMN6627482W: CD Signal Control (MN6627482W) (2/2)

| Pin No. | Terminal Name | Input/Output | Function |
|---|---|---|---|
| 47 | DSLF | Input/Output | DSL loop filter terminal. |
| 48 | PLLF | Input/Output | PLL loop filter terminal. |
| 49 | VCOF | Input/Output | VCO loop filter terminal. |
| 50 | AVDD2 | Input | Analog circuit power supply. (DSL, PLL and DA output sections for AD) |
| 51 | AVSS2 | Input | Analog circuit GND. (DSL, PLL and DA output sections for AD) |
| 52* | EFM, CK384 | Output | · IOSEL=H: EFM signal output.<br>· IOSEL=L: X-tal system 16.9344 MHz clock output.<br>Signal processing system: 384fs output. (VCO clock for jitter-free operation)<br>(X-tal system or signal processing system can be selected by the command.) |
| 53 | PCK, DSLB | Output | PLL extraction clock output or DSL balance output. fPCK-4.3218 MHz |
| 54 | VCOF2 | Input/Output | Loop filter terminal for digital servo 33.8688 MHz creation VCO.<br>X-tal 16.9344 MHz: external circuit is needed. |
| 55* | SUBC | Output | Subcode serial output. CD-TEXT mode 1: TEXT data output. |
| 56* | SBCK | Input | Subcode serial output clock input. CD-TEXT mode 1: TEXT data read clock input |
| 57 | VSS | Input | Oscillation circuit GND. |
| 58 | X1 | Input | Oscillation circuit input terminal. f=16.9344 MHz, 33.8688 MHz |
| 59 | X2 | Output | Oscillation circuit output terminal. f=16.9344 MHz, 33.8688 MHz |
| 60 | VDD | Input | Oscillation circuit power supply. |
| 61* | BYTCK, TRVSTP | Output | IOSEL=H: byte clock signal output.<br>IOSEL=L: traverse STOP signal output. H: STOP Mode |
| 62* | GIO1, /CLDCK | Output | Default: general purpose I/O port.<br>Command execution: terminal for subcode frame clock signal output. (fCLDCK=7.35 kHz) |
| 63* | GIO2, FCLK | Output | Default: general purpose I/O port.<br>Command execution: crystal frame clock signal output. (fFCLK=7.35 kHz) |
| 64* | IPFLAG | Output | Interpolation flag signal output. H: Interpolation |
| 65* | FLAG | Output | Flag signal output. |
| 66* | CLVS | Output | Output for spindle servo phase synchronization signal. H: CLV, L: Rough servo |
| 67* | CRC | Output | Default: output for subcode CRC check results. H: OK, L: NG |
| 68* | DEMPH | Output | Demphasis detection signal output. H: ON |
| 69* | RESY, FLAG6 | Output | IOSEL= H: resync signal RESY output for frame synchronization.<br>H: Synchronization, L: Synchronization lost<br>IOSEL=L: RAM address reset signal for error correct deinterleave.<br>FLAG 6 output L: Address reset |
| 70 | IOSEL | Input | Mode switch terminal. |
| 71 | /TEST | Input | Test terminal. Normal: H |
| 72 | AVDD1 | Input | Analog circuit power supply. (Audio output section (for both Lch and Rch)) |
| 73 | OUTL | Output | Lch audio output. |
| 74 | AVSS1 | Input | Analog circuit GND. (Audio output section (for both Lch and Rch)) |
| 75 | OUTR | Output | Rch audio output. |
| 76 | RSEL, GIO3 | Input | Default: RF signal polarity specification terminal.<br>Brightness H: RESEL=H Brightness L: RESEL=L<br>Command execution: general purpose I/O port.<br>RF signal polarity can be specified by command.<br>CD-TEXT mode 1 or 2: TEXT data read enabling signal (DQSY) output |
| 77 | CSEL | Input | Oscillation frequency specification terminal.<br>H: Oscillation frequency=33.8688 MHz L: Oscillation frequency=16.9344 MHz |
| 78 | PSEL | Input | IOSEL=H: test terminal. (Normal: L)<br>IOSEL=L: SRDATA input. |
| 79 | MSEL | Input | IOEL=H: SMCK terminal output, frequency switch terminal.<br>H: SMCK=8.4672 MHz L: SMCK=4.2336 MHz<br>IOSEL=L: LRCK input<br>H: Lch data, L: Rch data<br>SMCK=4.2336 MHz fixed |
| 80 | SSEL | Input | IOSEL=H: switch terminal for SUBQ terminal output mode.<br>H: Q code buffer mode L: CLDCK synchronization mode<br>IOSEL=L: BCLK input<br>Q code buffer mode fixed |

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

## IC401 VHiMN6627482W: CD Signal Control (MN6627482W)

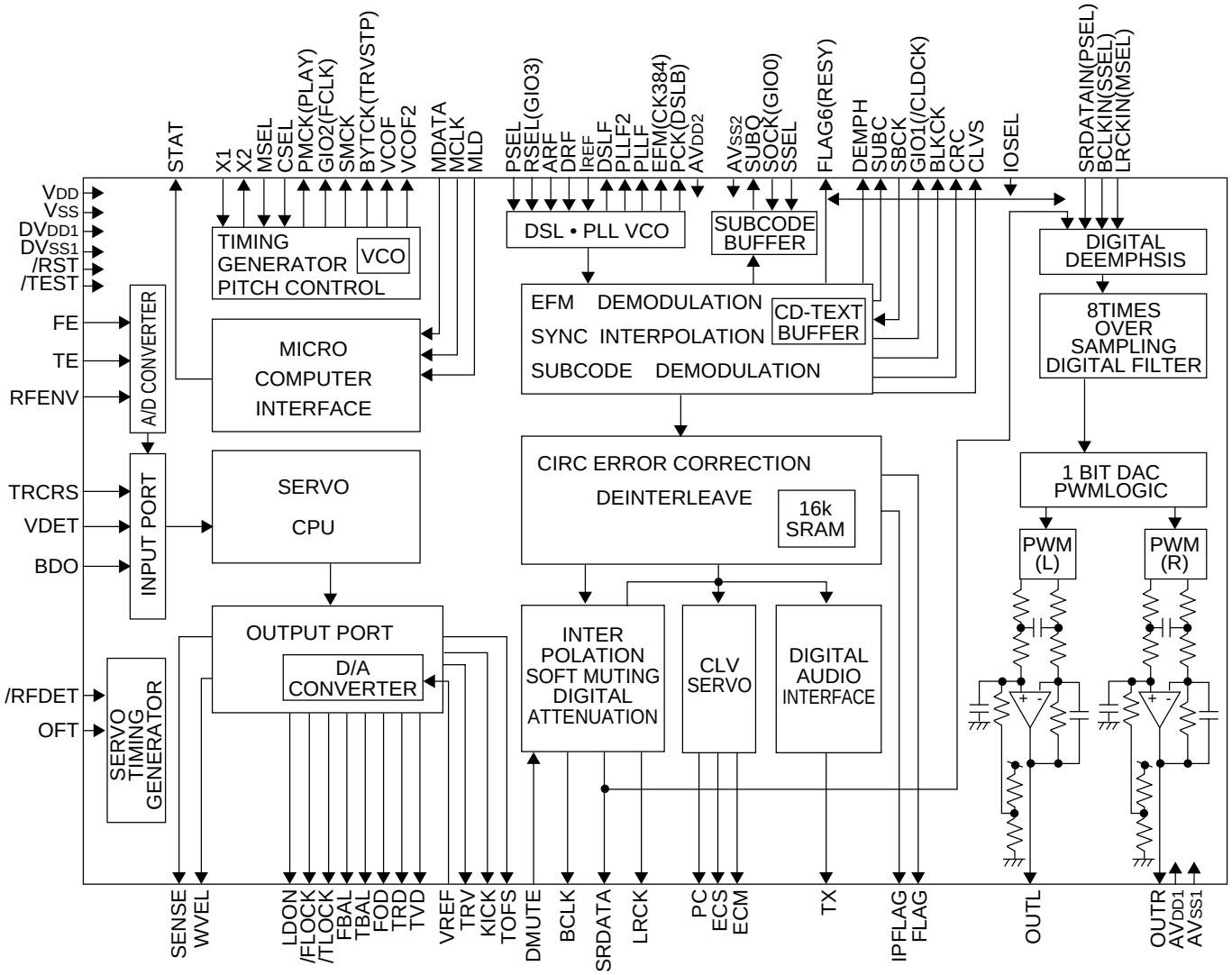
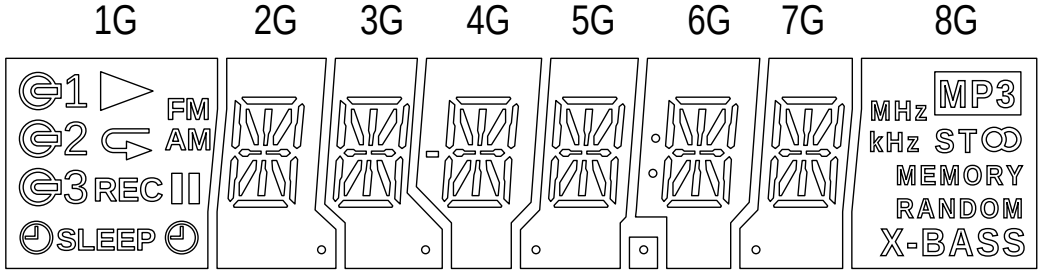


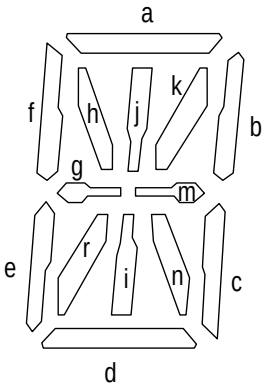

**Figure 39 BLOCK DIAGRAM OF IC**

# FL DISPLAY

**VFD701 : VVK250808//-1**




8G




( 2G-7G)

| PIN NO. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CONNECTION | F | F | NP | 1G | 2G | 3G | 4G | 5G | 6G | 7G | 8G | NC | NC | NC | NC | NC | NC | NC |
| PIN NO. | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | | |
| CONNECTION | P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 | P9 | P10 | P11 | P12 | P13 | P14 | NP | F | | |

| | 1G | 2G | 3G | 4G | 5G | 6G | 7G | 8G |
|---|---|---|---|---|---|---|---|---|
| P1 | ▷ | k | k | k | k | k | k | MEMORY |
| P2 | G3 | h | h | h | h | h | h | ST |
| P3 | G2 | f | f | f | f | f | f | kHz |
| P4 | G1 | b | b | b | b | b | b | MHz |
| P5 | | a | a | a | a | a | a | MP3 |
| P6 | ⇦ | g | g | g | g | g | g | RANDOM |
| P7 | FM | m | m | m | m | m | m | X-BASS |
| P8 | AM | r | r | r | r | r | r | |
| P9 | REC | j | j | j | j | j | j | ∞ |
| P10 | ▯▯ | n | n | n | n | n | n | |
| P11 | (Left) | c | c | c | c | c | c | |
| P12 | SLEEP | e | e | e | e | e | e | |
| P13 | (Right) | d | d | d | d | d | d | |
| P14 | | ○ | ○ | ▱ | ○ | ○<br>○ | ○ | ○ |

# SHARP PARTS GUIDE

## MINI COMPONENT SYSTEM

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## Explanation of capacitors/resistors parts codes

### Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT ..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN..... Cylindrical type (without lead wire)
VC • • TV..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

### Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN..... Cylindrical type (without lead wire)
VR • • TV..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

**NOTE:**
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

# CD-XP120W

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|

**CD-XP120W**

## INTEGRATED CIRCUITS

| | | | | |
|---|---|---|---|---|
| IC101 | VHIMC7805CT-1 | J | AF | Voltage Regulator,MC7805CT |
| IC201 | VHILM1876TF-1 | J | BD | Power Amp.,LM1876TF |
| IC301 | VHITA7358AP-1 | J | AG | FM Front End,TA7358AP |
| IC302 | VHILC72131/-1 | J | AP | PLL (Tuner),LC72131 |
| IC303 | VHILA1832S/-1 | J | AN | FM IF Det./FM Mpx./AM IF, LA1832S |
| IC401 | VHIMN6627482W | J | AV | CD Signal Control,MN6627482W |
| IC402 | VHIAN22000A-1 | J | AF | Head Amp.,AN22000A |
| IC403 | RH-IX0052SJZZ | J | AV | System Microcomputer, IX0052SJ |
| IC404 | VHIMM1469XH-1 | J | AN | Focus/Tracking/Spin/Sled Driver, MM1469XH |
| IC601 | VHILC75341M-1 | J | AM | Audio Processor,LC75341M |
| IC701 | VHISC16312/-1 | J | BD | System Microcomputer,SC16312 |
| IC801 | VHIAN7345K/-1 | J | AM | Playback and Record/Playback Amp.,AN7345K |
| IC901,902 | VHINJM4558D-1 | J | AH | Buffer Amp.,NJM4558D |

## TRANSISTORS

| | | | | |
|---|---|---|---|---|
| Q101 | VSKSA1015GR-1 | J | AB | Silicon,PNP,KSA1015 GR |
| Q102 | VSHSC1609GR-1 | J | AC | Silicon,NPN,HSC1609 GR |
| Q103,104 | VS2SD2012Y/-1 | J | AF | Silicon,NPN,2SD2012 Y |
| Q105 | VSHSC1609GR-1 | J | AC | Silicon,NPN,HSC1609 GR |
| Q106 | VS2SD2012Y/-1 | J | AF | Silicon,NPN,2SD2012 Y |
| Q109 | VSKRA102M//-1 | J | AC | Digital,PNP,KRA102 M |
| Q110,111 | VSKRC107M//-1 | J | AC | Digital,NPN,KRC107 M |
| Q112 | VSKRA102M//-1 | J | AC | Digital,PNP,KRA102 M |
| Q201 | VSKSC1815GR-1 | J | AB | Silicon,NPN,KSC1815 GR |
| Q202 | VSHSC1609GR-1 | J | AC | Silicon,NPN,HSC1609 GR |
| Q203,204 | VSKSC1815GR-1 | J | AB | Silicon,NPN,KSC1815 GR |
| Q302 | VSSC1674-C/-1 | J | | Silicon,NPN,SSC1674 C |
| Q306 | VSSC1674-C/-1 | J | | Silicon,NPN,SSC1674 C |
| Q351 | VSKRC104M//-1 | J | AC | Digital,NPN,KRC104 M |
| Q360 | VSKSA1015GR-1 | J | AB | Silicon,PNP,KSA1015 GR |
| Q401 | VSKSA1015GR-1 | J | AB | Silicon,PNP,KSA1015 GR |
| Q402 | VSKSC3203Y/-1 | J | AC | Silicon,NPN,KSC3203 Y |
| Q403 | VSKSA1271Y/-1 | J | AC | Silicon,PNP,KSA1271 Y |
| Q404 | VSHSB562-C/-1 | J | AC | Silicon,PNP,HSB562 C |
| Q405,406 | VSKSC1815GR-1 | J | AB | Silicon,NPN,KSC1815 GR |
| Q407 | VSKSA1271Y/-1 | J | AC | Silicon,PNP,KSA1271 Y |
| Q408 | VSKSC3203Y/-1 | J | AC | Silicon,NPN,KSC3203 Y |
| Q409 | VSKSC1815GR-1 | J | AB | Silicon,NPN,KSC1815 GR |
| Q410 | VSKSA1271Y/-1 | J | AC | Silicon,PNP,KSA1271 Y |
| Q411 | VSKRC102M//-1 | J | AC | Digital,NPN,KRC102 M |
| Q412,413 | VSKSC1815GR-1 | J | AB | Silicon,NPN,KSC1815 GR |
| Q701 | VSKSC1815GR-1 | J | AB | Silicon,PNP,KSA1815 GR |
| Q801 | VSKSC3203Y/-1 | J | AC | Silicon,NPN,KSC3203 Y |

## DIODES

| | | | | |
|---|---|---|---|---|
| D101~103 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D104 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D105 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D106 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D107 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| ⚠ D108~111 | VHD1N5402M/-1 | J | AE | Silicon,1N5402M |
| ⚠ D112~115 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D116,117 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D119 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D301,302 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D305~308 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D401 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D402,403 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D404~406 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| D601~603 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D701~704 | VHD1SS133//-1 | J | AA | Silicon,1SS133 |
| D706 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D801 | VHD1N4004//-1 | J | AB | Silicon,1N4004 |
| D802~806 | VHD1N4148//-1 | J | AA | Silicon,1N4148 |
| LED701 | VHPSD3210W+-1 | J | AC | LED,White,SD3210W |
| ZD101 | VHEDZ300BSB-1 | J | AB | Zener,30V,DZ30BSB |
| ZD102 | VHEDZ6R2BSA-1 | J | AB | Zener,6.2V,DZ6.2BSA |
| ZD103 | VHEDZ130BSA-1 | J | AC | Zener,13V,DZ13BSA |
| ZD104 | VHEDZ8R2BSC-1 | J | AB | Zener,8.2V,DZ8.2BSC |
| ZD201 | VHEDZ3R3BSB-1 | J | AB | Zener,3.3V,DZ3.3BSB |

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| | | | | |
|---|---|---|---|---|
| ZD203,204 | VHEDZ3R3BSB-1 | J | AB | Zener,3.3V,DZ3.3BSB |
| ZD351 | VHEDZ5R1BSB-1 | J | AC | Zener,5.1V,DZ5.1BSB |
| ZD401 | VHEDZ3R3BSB-1 | J | AB | Zener,3.3V,DZ3.3BSB |

## FILTERS

| | | | | |
|---|---|---|---|---|
| BF301 | RFILR0008AWZZ | J | AE | Band Pass Filter |
| CF302,303 | RFILF0004SJZZ | J | AG | FM IF,10.7 MHz |
| CF351 | RFILF0003AWZZ | J | AK | FM IF |
| CF352 | RFILA0003SJZZ | J | AF | AM IF |

## TRANSFORMERS

| | | | | |
|---|---|---|---|---|
| ⚠ T101 | RTRNP0088SJZZ | J | AZ | Power |
| T302 | RCILA0007SJZZ | J | AG | AM Antenna |
| T304 | RCILI0005SJZZ | J | AF | FM IF |
| T306 | RCILB0009SJZZ | J | AG | AM OSC. |
| T351 | RCILI0004SJZZ | J | AF | AM IF |

## COILS

| | | | | |
|---|---|---|---|---|
| L101,102 | RCILZ0024AWZZ | J | AC | 3 µH,Choke |
| L103 | VP-DH100K0000 | J | AB | 10 µH,Choke |
| L302 | RCILR0003SJZZ | J | AD | FM RF |
| L303 | RCILB0016SJZZ | J | AD | FM OSC. |
| L351,352 | VP-DH101K0000 | J | AB | 100 µH,Choke |
| L353 | VP-DH102K0000 | J | AB | 1 mH,Choke |
| L401,402 | VP-DHR82K0000 | J | AE | 0.82 µH,Choke |
| L403~405 | VP-DH2R2K0000 | J | AB | 2.2 µH,Peaking |
| L801 | RCILB0003SJZZ | J | AD | OSC,Bias |

## VARIABLE RESISTORS

| | | | | |
|---|---|---|---|---|
| VR351 | RVR-M0026AWZZ | J | AC | 10 kohm (B),Semi-VR [FM Mute Level] |
| VR901 | RVR-B0007SJZZ | J | AE | 20 kohms (B),Semi-VR [Mic Volume] |

## VARIABLE CAPACITORS

| | | | | |
|---|---|---|---|---|
| VD301 | VHCSVC348S/-1 | J | AK | Variable Capacitance,SVC348S |
| VD302,303 | VHCKDV147B/-1 | J | AH | Variable Capacitance,KDV147B |

## VIBRATORS

| | | | | |
|---|---|---|---|---|
| X351 | RCRM-0007SJZZ | J | AG | Ceramic,456 kHz |
| X352 | RCRSP0003SJZZ | J | AL | Crystal,4.5 MHz |
| X402 | RCRM-0008SJZZ | J | AG | Ceramic,8 MHz |
| X403 | RCRSP0002SJZZ | J | AL | Crystal,16.93 MHz |

## CAPACITORS

| | | | | |
|---|---|---|---|---|
| C101,102 | RC-GZA107AF1H | J | AC | 100 µF,50V,Electrolytic |
| C103~106 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C107 | RC-GZV227AF1H | J | AC | 220 µF,50V,Electrolytic |
| C108 | RC-GZA476AF1H | J | AB | 47 µF,50V,Electrolytic |
| C109 | RC-GZV337AF1V | J | AB | 330 µF,35V,Electrolytic |
| C110 | RC-GZA107AF1H | J | AC | 100 µF,50V,Electrolytic |
| C111 | RC-GZA107AF1E | J | AB | 100 µF,25V,Electrolytic |
| C112 | RC-GZW478AF1V | J | AH | 4700 µF,35V,Electrolytic |
| C113 | RC-GZA107AF1E | J | AB | 100 µF,25V,Electrolytic |
| C114 | RC-GZV477AF1E | J | AC | 470 µF,25V,Electrolytic |
| C115,116 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C117,118 | RC-GZW228AF1V | J | AF | 2200 µF,35V,Electrolytic |
| C119 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C120 | RC-GZA107AF1E | J | AB | 100 µF,25V,Electrolytic |
| C121 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C122 | RC-GZA477AF1C | J | AC | 470 µF,16V,Electrolytic |
| C123 | VCFYFA1HA473J | J | AB | 0.047 µF,50V,Thin Film |
| C124 | RC-GZA476AF1E | J | AB | 47 µF,25V,Electrolytic |
| C125~128 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C133,134 | VCKYPA1HB472K | J | AB | 0.0047 µF,50V |
| C141 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C142 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C143 | RC-GZA227AF1E | J | AB | 220 µF,25V,Electrolytic |
| C201~204 | RC-GZA476AF1H | J | AB | 47 µF,50V,Electrolytic |
| C205 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C207 | RC-GZA476AF1E | J | AB | 47 µF,25V,Electrolytic |
| C208 | RC-GZA477AF1C | J | AC | 470 µF,16V,Electrolytic |

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| C301 | VCKYCY1EF123Z | J | AA | 0.012 µF,25V |
| C302,303 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C304 | VCKYCY1EF103Z | J | AA | 0.01 µF,25V |
| C305 | VCKYCY1HB472K | J | AA | 0.0047 µF,50V |
| C306 | VCCUCY1HJ9R0D | J | AB | 9 pF (UJ),50V |
| C307 | VCKYCY1HB472K | J | AA | 0.0047 µF,50V |
| C308 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C309 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C311 | VCCCCY1HH100J | J | AA | 10 pF (CH),50V |
| C312 | VCCSCY1HL330J | J | AD | 33 pF,50V |
| C313 | VCCUCY1HJ6R0D | J | AB | 6 pF (UJ),50V |
| C314 | VCCCCY1HH220J | J | AA | 22 pF (CH),50V |
| C315 | VCKYCY1HB101K | J | AB | 100 pF,50V |
| C316 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C317 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C318 | VCCSCY1HL5R0C | J | AD | 5 pF,50V |
| C319 | VCCCCY1HH180J | J | AA | 18 pF (CH),50V |
| C320 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C321 | VCKYCY1HB332K | J | AA | 0.0033 µF,50V |
| C329 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C330 | VCCCPA1HH120J | J | AA | 12 pF (CH),50V |
| C331 | VCKYCY1EF473Z | J | AB | 0.047 µF,25V |
| C332 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C334 | VCCUPA1HJ270J | J | AA | 27 pF (UJ),50V |
| C335 | VCKYCY1HB561K | J | AA | 560 pF,50V |
| C337 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C343,344 | VCCSCY1HL330J | J | AD | 33 pF,50V |
| C349 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C350,351 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C352 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C353,354 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C355 | VCCSCY1HL220J | J | AD | 220 pF,50V |
| C356 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C357 | RC-GZA225AF1H | J | AB | 2.2 µF,50V,Electrolytic |
| C358 | RC-GZA105AF1H | J | AB | 1 µF,50V,Electrolytic |
| C360,361 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C362 | RC-GZA335AF1H | J | AB | 3.3 µF,50V,Electrolytic |
| C363 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C364 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C365 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C366 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C367,368 | RC-GZA105AF1H | J | AB | 1 µF,50V,Electrolytic |
| C369 | VCCSCY1HL560J | J | AD | 56 pF,50V |
| C370~372 | RC-GZA105AF1H | J | AB | 1 µF,50V,Electrolytic |
| C373,374 | VCTYPA1CX223K | J | AA | 0.022 µF,16V |
| C378 | VCKYPA1HB331K | J | AA | 330 pF,50V |
| C380 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C381 | VCCCCY1HH120J | J | AA | 12 pF (CH),50V |
| C382 | VCCCCY1HH150J | J | AA | 15 pF (CH),50V |
| C383 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C384 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C385 | VCKYPA1HF103Z | J | AB | 0.01 µF,50V |
| C386 | VCKYPA1HB331K | J | AA | 330 pF,50V |
| C387 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C391 | RC-GZA476AF1C | J | AB | 47 µF,16V,Electrolytic |
| C392 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C393 | RC-GZA105AF1H | J | AB | 1 µF,50V,Electrolytic |
| C394 | RC-GZA476AF1C | J | AB | 47 µF,16V,Electrolytic |
| C395 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C396 | RC-GZA107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C397 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C398 | RC-GZA107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C399 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C401 | RC-GZA477AF1C | J | AC | 470 µF,16V,Electrolytic |
| C402 | RC-EZD476AF1A | J | AC | 47 µF,10V,Electrolytic |
| C403 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C404 | RC-GZA476AF1C | J | AB | 47 µF,16V,Electrolytic |
| C405 | RC-GZA226AF1H | J | AB | 22 µF,50V,Electrolytic |
| C406 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C407 | VCKYPA1HF334Z | J | AC | 0.33 µF,50V |
| C408 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C409,410 | VCCSPA1HL820J | J | AA | 82 pF,50V |
| C411 | VCKYCY1HB101K | J | AB | 100 pF,50V |
| C412,413 | VCKYPA1HF273Z | J | AA | 0.027 µF,50V |
| C414 | VCKYPA1HB331K | J | AA | 330 pF,50V |
| C415 | VCKYCY1HB562K | J | AA | 0.0056 µF,50V |
| C416 | RC-GZA476AF1C | J | AB | 47 µF,16V,Electrolytic |
| C417 | VCKYCY1EF103Z | J | AA | 0.01 µF,25V |
| C418 | VCKYCY1HB181K | J | AB | 180 pF,50V |
| C419 | VCKYCY1HB562K | J | AA | 0.0056 µF,50V |
| C420 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C421 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |

| NO. | PARTS CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| C422 | VCKYCY1EF103Z | J | AA | 0.01 µF,25V |
| C423 | VCKYPA1HB222K | J | AA | 0.0022 µF,50V |
| C424 | RC-GZA476AF1C | J | AB | 47 µF,16V,Electrolytic |
| C425 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C426 | RC-GZA335AF1H | J | AB | 3.3 µF,50V,Electrolytic |
| C427 | VCFYFA1HA104J | J | AC | 0.1 µF,50V,Thin Film |
| C428 | VCKYPA1HB561K | J | AA | 560 pF,50V |
| C429 | VCKYCY1EF123Z | J | AA | 0.012 µF,25V |
| C430 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C431 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C432 | VCKYPA1HF684Z | J | AC | 0.68 µF,50V |
| C433 | VCKYPA1HF334Z | J | AC | 0.33 µF,50V |
| C434 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C435 | RC-EZD107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C436 | VCKYPA1HF334Z | J | AC | 0.33 µF,50V |
| C437 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C438 | VCCCCY1HH150J | J | AA | 15 pF (CH),50V |
| C441 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C442 | VCCCCY1HH150J | J | AA | 15 pF (CH),50V |
| C443 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C444 | VCKYCY1HB272K | J | AA | 0.0027 µF,50V |
| C445 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C446 | RC-GZA477AF0J | J | AB | 470 µF,6.3V,Electrolytic |
| C447 | VCKYCY1HB272K | J | AA | 0.0027 µF,50V |
| C448 | VCKYCY1HB102K | J | AA | 0.001 µF,50V |
| C449,450 | RC-EZD106AF1H | J | AB | 10 µF,50V,Electrolytic |
| C451 | VCCCCY1HH121J | J | AA | 120 pF (CH),50V |
| C452 | RC-GZA107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C454,455 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C459 | VCKYPA1HF103Z | J | AB | 0.01 µF,50V |
| C601~606 | RC-GZA106AF1C | J | AB | 10 µF,16V,Electrolytic |
| C607,608 | RC-GZA475AF1H | J | AB | 4.7 µF,50V,Electrolytic |
| C609,610 | RC-GZA225AF1H | J | AB | 2.2 µF,50V,Electrolytic |
| C611,612 | VCKYPA1HB272K | J | AA | 0.0027 µF,50V |
| C613,614 | RC-QZA104AFYJ | J | AC | 0.1 µF,50V,Mylar |
| C615,616 | RC-GZA225AF1C | J | AC | 2.2 µF,16V,Electrolytic |
| C617 | RC-GZA336AF1C | J | AB | 33 µF,16V,Electrolytic |
| C618 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C619~621 | VCKYCY1HB221K | J | AA | 220 pF,50V |
| C622,623 | VCKYCY1EF104Z | J | AA | 0.1 µF,25V |
| C701 | RC-GZA107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C702 | VCKYPA1HF473Z | J | AB | 0.047 µF,50V |
| C703~705 | VCKYPA1HB101K | J | AA | 100 pF,50V |
| C706 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C707 | VCKYPA1HF333Z | J | AA | 0.033 µF,50V |
| C801~804 | VCKYCY1HB561K | J | AA | 560 pF,50V |
| C805,806 | VCKYCY1HB331K | J | AA | 330 pF,50V |
| C807 | VCKYPA1HB272K | J | AA | 0.0027 µF,50V |
| C808,809 | VCKYCY1HB331K | J | AA | 330 pF,50V |
| C810,811 | RC-GZA107AF1E | J | AB | 100 µF,25V,Electrolytic |
| C812 | VCKYPA1HB272K | J | AA | 0.0027 µF,50V |
| C813,814 | VCKYPA1HB561K | J | AA | 560 pF,50V |
| C815,816 | VCKYPA1HF333Z | J | AA | 0.033 µF,50V |
| C817,818 | RC-GZA476AF1E | J | AB | 47 µF,25V,Electrolytic |
| C819,820 | VCKYPA1HB222K | J | AA | 0.0022 µF,50V |
| C821 | RC-GZA335AF1H | J | AB | 3.3 µF,50V,Electrolytic |
| C822 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C823,824 | VCKYPA1HB102K | J | AA | 0.001 µF,50V |
| C825,826 | RC-GZA226AF1H | J | AB | 22 µF,50V,Electrolytic |
| C827 | VCKYCY1EF223Z | J | AB | 0.022 µF,25V |
| C828 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C829,830 | VCKYPA1HB332K | J | AA | 0.0033 µF,50V |
| C831,832 | RC-GZA476AF1E | J | AB | 47 µF,25V,Electrolytic |
| C833 | RC-GZA226AF1H | J | AB | 22 µF,50V,Electrolytic |
| C834 | RC-GZA227AF1C | J | AB | 220 µF,16V,Electrolytic |
| C835 | VCKYPA1HF223Z | J | AB | 0.022 µF,50V |
| C836 | VCKYPA1HB222K | J | AA | 0.0022 µF,50V |
| C837 | RC-GZA107AF1A | J | AB | 100 µF,10V,Electrolytic |
| C838 | VCQYKA1HM223K | J | AB | 0.022 µF,50V,Mylar |
| C839 | VCQYKA1HM472K | J | AB | 0.0047 µF,50V,Mylar |
| C840 | RC-GZA227AF1C | J | AB | 220 µF,16V,Electrolytic |
| C901 | VCKYPA1HB152K | J | AA | 0.0015 µF,50V |
| C902 | RC-GZA224AF1C | J | AB | 0.22 µF,16V,Electrolytic |
| C903 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C904 | VCKYPA1HB221K | J | AA | 220 pF,50V |
| C905 | VCKYPA1HB471K | J | AA | 470 pF,50V |
| C906 | RC-GZA475AF1C | J | AB | 4.7 µF,16V,Electrolytic |
| C907 | RC-GZA107AF1C | J | AB | 100 µF,16V,Electrolytic |
| C910,911 | VCKYPA1HB471K | J | AA | 470 pF,50V |
| C912,913 | RC-GZA105AF1C | J | AB | 1 µF,16V,Electrolytic |

# CD-XP120W

## RESISTORS

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| | VRS-CY1JB000J | J | AA | 0 ohm,Jumper,0.8×1.55mm,Green |
| R101 | VRD-ST2CD223J | J | AA | 22 kohms,1/6W |
| R102 | VRD-ST2EE100J | J | AA | 10 ohm,1/4W |
| R103 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R104 | VRD-ST2CD123J | J | AA | 12 kohms,1/6W |
| R105,106 | VRD-ST2CD331J | J | AA | 330 ohms,1/6W |
| R107 | VRS-CY1JB122J | J | AA | 1.2 kohms,1/16W |
| R108 | VRD-ST2EE101J | J | AA | 100 ohm,1/4W |
| R109,110 | VRD-ST2EE470J | J | AA | 47 ohms,1/4W |
| R111 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R113,114 | VRD-ST2CD223J | J | AA | 22 kohms,1/6W |
| R115 | VRD-ST2EE101J | J | AA | 100 ohm,1/4W |
| R116 | VRD-ST2EE470J | J | AA | 47 ohms,1/4W |
| R117 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R118 | VRD-ST2CD223J | J | AA | 22 kohms,1/6W |
| R119,120 | VRD-ST2EE4R7J | J | AA | 4.7 ohms,1/4W |
| R122,123 | VRD-ST2EE100J | J | AA | 10 ohm,1/4W |
| R124 | VRD-ST2EE821J | J | AA | 820 ohms,1/4W |
| R127,128 | VRD-ST2EE391J | J | AA | 390 ohms,1/4W |
| R129 | VRD-ST2EE100J | J | AA | 10 ohm,1/4W |
| R133 | VRS-CY1JB122J | J | AA | 1.2 kohms,1/16W |
| R201 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R202 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R203,204 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R205,206 | VRD-ST2CD104J | J | AA | 100 kohm,1/6W |
| R207~211 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R212~214 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R215 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R216 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R217~219 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R220 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R221 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R224 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R301 | VRD-ST2EE220J | J | AA | 22 ohms,1/4W |
| R302 | VRS-CY1JB104J | J | AA | 100 kohm,1/16W |
| R303 | VRD-ST2CD333J | J | AA | 33 kohms,1/6W |
| R304 | VRS-CY1JB473J | J | AA | 47 kohms,1/16W |
| R305 | VRS-CY1JB681J | J | AA | 680 ohms,1/16W |
| R306 | VRS-CY1JB330J | J | AA | 33 ohms,1/16W |
| R307 | VRD-ST2EE470J | J | AA | 47 ohms,1/4W |
| R308 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R309 | VRD-ST2EE471J | J | AA | 470 ohms,1/4W |
| R310 | VRS-CY1JB472J | J | AA | 4.7 kohms,1/16W |
| R312 | VRS-CY1JB222J | J | AA | 2.2 kohms,1/16W |
| R313 | VRS-CY1JB681J | J | AA | 680 ohms,1/16W |
| R314,315 | VRS-CY1JB330J | J | AA | 33 ohms,1/16W |
| R316 | VRS-CY1JB331J | J | AA | 330 ohms,1/16W |
| R323 | VRS-CY1JB683J | J | AA | 68 kohms,1/16W |
| R336 | VRD-ST2CD562J | J | AA | 5.6 kohms,1/6W |
| R350 | VRS-CY1JB272J | J | AA | 2.7 kohms,1/16W |
| R351 | VRS-CY1JB562J | J | AA | 5.6 kohms,1/16W |
| R352 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R353 | VRS-CY1JB271J | J | AA | 270 ohms,1/16W |
| R355 | VRS-CY1JB332J | J | AA | 3.3 kohms,1/16W |
| R356 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R357 | VRS-CY1JB474J | J | AA | 470 kohms,1/16W |
| R358 | VRS-CY1JB822J | J | AA | 8.2 kohms,1/16W |
| R359 | VRS-CY1JB182J | J | AA | 1.8 kohms,1/16W |
| R360 | VRS-CY1JB472J | J | AA | 4.7 kohms,1/16W |
| R361,362 | VRS-CY1JB123J | J | AA | 12 kohms,1/16W |
| R363 | VRD-ST2CD332J | J | AA | 3.3 kohms,1/6W |
| R364 | VRS-CY1JB332J | J | AA | 3.3 kohms,1/16W |
| R365 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R366 | VRS-CY1JB222J | J | AA | 2.2 kohms,1/16W |
| R371~374 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R376 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R377 | VRD-ST2CD562J | J | AA | 5.6 kohms,1/6W |
| R379 | VRS-CY1JB222J | J | AA | 2.2 kohms,1/16W |
| R380 | VRD-ST2CD152J | J | AA | 1.5 kohms,1/6W |
| R381 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R382 | VRD-ST2EE331J | J | AA | 330 ohms,1/4W |
| R383 | VRS-CY1JB562J | J | AA | 5.6 kohms,1/16W |
| R384 | VRD-ST2CD682J | J | AA | 6.8 kohms,1/6W |
| R385 | VRD-ST2CD562J | J | AA | 5.6 kohms,1/6W |
| R386 | VRD-ST2EE331J | J | AA | 330 ohms,1/4W |
| R387 | VRD-ST2CD562J | J | AA | 5.6 kohms,1/6W |
| R391,392 | VRD-ST2EE391J | J | AA | 390 ohms,1/4W |
| R393 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R395 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |

| NO. | PARTS CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| R401 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R402 | VRD-ST2CD224J | J | AA | 220 kohms,1/6W |
| R403 | VRS-CY1JB100J | J | AA | 10 ohm,1/16W |
| R404 | VRD-ST2CD330J | J | AA | 33 ohms,1/6W |
| R405 | VRS-CY1JB101J | J | AA | 100 ohm,1/16W |
| R406 | VRD-ST2EE4R7J | J | AA | 4.7 ohms,1/4W |
| R407 | VRD-ST2CD393J | J | AA | 39 kohms,1/6W |
| R408 | VRS-CY1JB222J | J | AA | 2.2 kohms,1/16W |
| R409 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R410 | VRD-ST2CD752J | J | AA | 7.5 kohms,1/6W |
| R411 | VRS-CY1JB392J | J | AA | 3.9 kohms,1/16W |
| R412 | VRS-CY1JB222J | J | AA | 2.2 kohms,1/16W |
| R413 | VRS-CY1JB392J | J | AA | 3.9 kohms,1/16W |
| R414 | VRD-ST2CD222J | J | AA | 2.2 kohms,1/6W |
| R415 | VRD-ST2CD911J | J | AA | 910 ohms,1/6W |
| R416 | VRD-ST2CD274J | J | AA | 270 kohms,1/6W |
| R417 | VRD-ST2CD224J | J | AA | 220 kohms,1/6W |
| R418 | VRD-ST2CD152J | J | AA | 1.5 kohms,1/6W |
| R419 | VRD-ST2CD332J | J | AA | 3.3 kohms,1/6W |
| R420 | VRD-ST2CD623J | J | AA | 62 kohms,1/6W |
| R421 | VRD-ST2CD223J | J | AA | 22 kohms,1/6W |
| R422 | VRD-ST2CD105J | J | AA | 1 Mohm,1/6W |
| R423 | VRD-ST2CD182J | J | AA | 1.8 kohms,1/6W |
| R424 | VRD-ST2CD123J | J | AA | 12 kohms,1/6W |
| R425 | VRD-ST2CD562J | J | AA | 5.6 kohms,1/6W |
| R426,427 | VRD-ST2CD183J | J | AA | 18 kohms,1/6W |
| R428 | VRD-ST2CD152J | J | AA | 1.5 kohms,1/6W |
| R429 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R430 | VRD-ST2CD223J | J | AA | 22 kohms,1/6W |
| R431 | VRD-ST2CD332J | J | AA | 3.3 kohms,1/6W |
| R432 | VRS-CY1JB394J | J | AA | 390 kohms,1/16W |
| R433 | VRS-CY1JB104J | J | AA | 100 kohm,1/16W |
| R434 | VRD-ST2CD152J | J | AA | 1.5 kohms,1/6W |
| R435A,B | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R435C | VRD-ST2CD332J | J | AA | 3.3 kohms,1/6W |
| R436 | VRD-ST2CD154J | J | AA | 150 kohms,1/6W |
| R437 | VRD-ST2CD332J | J | AA | 3.3 kohms,1/6W |
| R438 | VRD-ST2CD272J | J | AA | 2.7 kohms,1/6W |
| R440 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R441 | VRS-CY1JB104J | J | AA | 100 kohm,1/16W |
| R442A | VRS-CY1JB820J | J | AA | 82 ohms,1/16W |
| R442B | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R443 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R444~446 | VRS-CY1JB473J | J | AA | 47 kohms,1/16W |
| R447,448 | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R449 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R450 | VRD-ST2CD823J | J | AA | 82 kohms,1/6W |
| R451 | VRD-ST2CD105J | J | AA | 1 Mohm,1/6W |
| R452~455 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R456 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R457 | VRD-ST2CD224J | J | AA | 220 kohms,1/6W |
| R458 | VRD-ST2CD104J | J | AA | 100 kohm,1/6W |
| R459,460 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R461 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R462 | VRD-ST2CD124J | J | AA | 120 kohms,1/6W |
| R463 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R464 | VRD-ST2CD271J | J | AA | 270 ohms,1/6W |
| R465 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R466 | VRD-ST2CD272J | J | AA | 2.7 kohms,1/6W |
| R467,468 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R469 | VRD-ST2EE1R5J | J | AA | 1.5 ohms,1/4W |
| R470 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R471A | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R471B | VRS-CY1JB121J | J | AA | 120 ohms,1/16W |
| R473 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R474 | VRD-ST2CD272J | J | AA | 2.7 kohms,1/6W |
| R475 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R476~478 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R479 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R479A | VRS-CY1JB182J | J | AA | 1.8 kohms,1/16W |
| R480 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R481 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R482 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R483 | VRS-CY1JB561J | J | AA | 560 ohms,1/16W |
| R484 | VRS-CY1JB681J | J | AA | 680 ohms,1/16W |
| R485 | VRD-ST2CD561J | J | AA | 560 ohms,1/6W |
| R486 | VRD-ST2CD681J | J | AA | 680 ohms,1/6W |
| R487 | VRD-ST2EE101J | J | AA | 100 ohm,1/4W |
| R488A | VRS-CY1JB562J | J | AA | 5.6 kohms,1/16W |
| R488B | VRS-CY1JB103J | J | AA | 10 kohm,1/16W |
| R489A,B | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R490 | VRS-CY1JB475J | J | AA | 4.7 Mohms,1/16W |

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| R491 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R492 | VRD-ST2CD123J | J | AA | 12 kohms,1/6W |
| R493 | VRS-CY1JB752J | J | AA | 7.5 kohms,1/16W |
| R494 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R495~499 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R601 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R602,603 | VRS-CY1JB102J | J | AA | 1 kohm,1/16W |
| R604~609 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R610,611 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R612,613 | VRD-ST2CD392J | J | AA | 3.9 kohms,1/6W |
| R614,615 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R616,617 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R618,619 | VRD-ST2CD333J | J | AA | 33 kohms,1/6W |
| R620,621 | VRD-ST2CD561J | J | AA | 560 ohms,1/6W |
| R622,623 | VRD-ST2CD104J | J | AA | 100 kohm,1/6W |
| R624,625 | VRD-ST2CD392J | J | AA | 3.9 kohms,1/6W |
| R701 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R702 | VRD-ST2EE470J | J | AA | 47 ohms,1/4W |
| R703~707 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R708 | VRD-ST2EE100J | J | AA | 10 ohm,1/4W |
| R711 | VRD-ST2CD513J | J | AA | 51 kohms,1/6W |
| R712 | VRD-ST2CD272J | J | AA | 2.7 kohms,1/6W |
| R713 | VRD-ST2CD271J | J | AA | 270 ohms,1/6W |
| R801~804 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R805 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R806,807 | VRD-ST2CD270J | J | AA | 27 ohms,1/6W |
| R808 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R809,810 | VRD-ST2CD104J | J | AA | 100 kohm,1/6W |
| R811,812 | VRS-CY1JB392J | J | AA | 3.9 kohms,1/16W |
| R813,814 | VRD-ST2CD333J | J | AA | 33 kohms,1/6W |
| R815,816 | VRS-CY1JB562J | J | AA | 5.6 kohms,1/16W |
| R817 | VRD-ST2CD392J | J | AA | 3.9 kohms,1/6W |
| R818,819 | VRD-ST2CD682J | J | AA | 6.8 kohms,1/6W |
| R820 | VRD-ST2CD392J | J | AA | 3.9 kohms,1/6W |
| R821,822 | VRD-ST2CD152J | J | AA | 1.5 kohms,1/6W |
| R823 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R824,825 | VRD-ST2CD101J | J | AA | 100 ohm,1/6W |
| R826,827 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R828 | VRD-ST2CD473J | J | AA | 47 kohms,1/6W |
| R829 | VRD-ST2EE221J | J | AA | 220 ohms,1/4W |
| R830 | VRD-ST2CD101J | J | AA | 100 ohm,1/6W |
| R831 | VRD-ST2CD151J | J | AA | 150 ohms,1/6W |
| R832 | VRD-ST2CD333J | J | AA | 33 kohms,1/6W |
| R833 | VRD-ST2CD100J | J | AA | 10 ohm,1/6W |
| R834 | VRS-CY1JB333J | J | AA | 33 kohms,1/16W |
| R835 | VRD-ST2CD183J | J | AA | 18 kohms,1/6W |
| R836 | VRD-ST2CD822J | J | AA | 8.2 kohms,1/6W |
| R837 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R838 | VRS-CY1JB562J | J | AA | 5.6 kohms,1/16W |
| R901 | VRD-ST2CD272J | J | AA | 2.7 kohms,1/6W |
| R902 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R903 | VRD-ST2CD393J | J | AA | 39 kohms,1/6W |
| R904 | VRD-ST2CD331J | J | AA | 330 ohms,1/6W |
| R905 | VRD-ST2CD333J | J | AA | 33 kohm,1/6W |
| R906 | VRD-ST2CD102J | J | AA | 1 kohm,1/6W |
| R907,908 | VRD-ST2CD103J | J | AA | 10 kohm,1/6W |
| R909,910 | VRD-ST2CD472J | J | AA | 4.7 kohms,1/6W |
| R911,912 | VRD-ST2CD393J | J | AA | 39 kohms,1/6W |
| R913,914 | VRD-ST2CD101J | J | AA | 100 ohm,1/6W |
| R915,916 | VRD-ST2CD393J | J | AA | 39 kohms,1/6W |
| R919 | VRD-ST2EE680J | J | AA | 68 ohms,1/4W |

## OTHER CIRCUITRY PARTS

| | | | | |
|---|---|---|---|---|
| BI101/CNS101 | QCNWN0468SJZZ | J | AF | Connector Ass'y,8/8Pin |
| BI102/CNS102 | QCNWN0407SJZZ | J | AE | Connector Ass'y,6/5Pin |
| BI103/CNS103 | QCNWN0472SJZZ | J | AD | Connector Ass'y,3/3Pin |
| BI104/CNS104 | QCNWN0438SJZZ | J | AG | Connector Ass'y,8/7Pin |
| BI105A/B/CNS105 | QCNWN0440SJZZ | J | AF | Connector Ass'y,7/2/10Pin |
| BI107/CNS107 | QCNWN0467SJZZ | J | AD | Connector Ass'y,4/4Pin |
| BI108/CNS108 | QCNWN0409SJZZ | J | AF | Connector Ass'y,5/5Pin |
| BI401/CNS401 | QCNWN0405SJZZ | J | AE | Connector Ass'y,4/4Pin |
| BI402A/B/CNS402 | QCNWN0474SJZZ | J | AD | Connector Ass'y,2/2/4Pin |
| BI405/CNS405 | QCNWN0404SJZZ | J | AE | Connector Ass'y,7/6Pin |
| BI406/CNS406 | QCNWN0403SJZZ | J | AF | Connector Ass'y,9/8Pin |
| BI407/CNS407 | QCNWN0402SJZZ | J | AF | Connector Ass'y,8/7Pin |
| BI701/CNS701 | QCNWN0434SJZZ | J | AF | Connector Ass'y,7/7Pin |
| BI702/CNS702 | QCNWN0442SJZZ | J | AE | Connector Ass'y,2/2Pin |
| CNP101 | QCNCM999HAFZZ | J | AD | Plug,8Pin |
| CNP102 | QCNCM999EAFZZ | J | AG | Plug,5Pin |
| CNP103 | QCNCM999CAFZZ | J | AG | Plug,3Pin |

| NO. | PARTS CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| CNP104 | QCNCM998GAFZZ | J | AH | Plug,7Pin |
| CNP105 | QCNCM999KAFZZ | J | AD | Plug,10Pin |
| CNP107 | QCNCM999DAFZZ | J | AG | Plug,4Pin |
| CNP108 | QCNCM050ESJZZ | J | AD | Plug,5Pin |
| CNP301 | QCNCM049BSJZZ | J | AB | Plug,2Pin |
| CNP402 | QCNCM004DAFZZ | J | AD | Plug,4Pin |
| CNP405 | 92LCONE6P53254 | J | AC | Plug,6Pin |
| CNP701 | QCNCM004GAFZZ | J | AC | Plug,7Pin |
| CNP702 | QCNCM004CAFZZ | J | AB | Plug,3Pin |
| CNP801 | QCNCM999CAFZZ | J | AG | Plug,3Pin |
| CNP802 | QCNCM999DAFZZ | J | AG | Plug,4Pin |
| CNP803 | QCNCM047DSJZZ | J | AD | Plug,4Pin |
| CNP804 | QCNCM046CSJZZ | J | AD | Plug,3Pin |
| ⚠ F101,102 | QFS-D322CAWNI | J | AC | Fuse,T3.15A L 250V |
| ⚠ F103 | QFS-D162CAWNI | J | AC | Fuse,T1.6A L 250V |
| JK101 | QJAKM0001SJZZ | J | AG | Jack,Headphones |
| JK901 | QJAKJ0006SJZZ | J | AF | Jack,Mic |
| M1 | 9GDM03-DJ001 | J | | Motor with Pulley [Loading] |
| M2(225-8) | 9GDSO2210168 | J | | Motor with Pulley [Tape] |
| M3 | 9GDM03-DJ001 | J | | Motor with Worm Pulley [T/T Up/Down] |
| MR401 | RCORF0018AWZZ | J | AG | Core |
| NM801 | RMOTV0409AFM1 | J | AN | Motor with Gear [Sled] |
| NM802 | RMOTV0003SJM1 | J | AP | Motor with Chassis [Spindle] |
| RX701 | VHLN64H380A-1 | J | AK | Remote Sensor,N64H380A |
| ⚠ SO101 | QSOCA0212AWZZ | J | AD | Socket,AC Input |
| SO102 | QTANA0007SJZZ | J | AF | Terminal,Speaker |
| SO301 | QTANC9005SJZZ | J | AD | Terminal,FM Antenna |
| SW1 | 9GDM03-KG001 | J | | Switch,Push Type [Open/Close] |
| SW2 | 9GDM03-KG001 | J | | Switch,Push Type [DISC] |
| SW3 | 9GDM03-KG001 | J | | Switch,Push Type [UP] |
| SW4 | QSW-F9001AWZZ | J | AE | Switch,Leaf Type [Pickup In] |
| SW5 | 9GDSO2210171 | J | | Switch,Leaf Type [Tape 1 Play] |
| SW6 | 9GDSO2210172 | J | | Switch,Leaf Type [Tape 1 FF/REW] |
| SW7 | 9GDSO2210172 | J | | Switch,Leaf Type [Tape 2 FF/REW] |
| SW8 | 9GDSO2210171 | J | | Switch,Leaf Type [Tape 2 Play] |
| ⚠ SW101 | QSOCE0008AWZZ | J | AH | Switch,Rotary Type [Voltage Selector] |
| SW102 | QSW-S0024AWZZ | J | AE | Switch,Slide Type [Span Selector] |
| SW701 | QSW-K0005SJZZ | J | AD | Switch,Key Type [ON/STAND-BY] |
| SW702 | QSW-K0005SJZZ | J | AD | Switch,Key Type [CD] |
| SW703 | QSW-K0005SJZZ | J | AD | Switch,Key Type [TUNING UP] |
| SW704 | QSW-K0005SJZZ | J | AD | Switch,Key Type [PRESET UP] |
| SW705 | QSW-K0005SJZZ | J | AD | Switch,Key Type [TUNER (BAND)] |
| SW706 | QSW-K0005SJZZ | J | AD | Switch,Key Type [TUNING DOWN] |
| SW707 | QSW-K0005SJZZ | J | AD | Switch,Key Type [PRESET DOWN] |
| SW708 | QSW-K0005SJZZ | J | AD | Switch,Key Type [EQUALIZER/X-BASS/DEMO] |
| SW709 | QSW-K0005SJZZ | J | AD | Switch,Key Type [TAPE] |
| SW710 | QSW-K0005SJZZ | J | AD | Switch,Key Type [STOP] |
| SW711 | QSW-K0005SJZZ | J | AD | Switch,Key Type [VOLUME UP] |
| SW712 | QSW-K0005SJZZ | J | AD | Switch,Key Type [DISC SKIP] |
| SW713 | QSW-K0005SJZZ | J | AD | Switch,Key Type [OPEN/CLOSE] |
| SW714 | QSW-K0005SJZZ | J | AD | Switch,Key Type [PLAY/REPEAT] |
| SW715 | QSW-K0005SJZZ | J | AD | Switch,Key Type [VOLUME DOWN] |
| SW801 | QSW-S0001SJZZ | J | AD | Switch,Slide Type [REC./P.B.] |
| VFD701 | VVK250808//-1 | J | AX | FL Display |

## CD MECHANISM PARTS

| | | | | |
|---|---|---|---|---|
| 301 | MLEVP1054AFZZ | J | AC | Rail,Guide |
| 302 | NGERH0586AFZZ | J | AC | Gear,Middle |
| 303 | NGERH0587AFZZ | J | AC | Gear,Drive |
| 304 | NSFTM0291AFFW | J | AD | Shaft,Guide |
| ⚠ 308 | DCTRH8004SJ01 | J | BC | Pickup Unit Ass'y |
| 308- 1 | ———— | | — | Pickup Unit (Not Replacement Item) |
| 308- 2 | MSPRC0961AFZZ | J | AA | Spring,Rack |
| 308- 3 | NGERR0043AFZZ | J | AC | Gear,Rack |
| 701 | LX-WZ1070AFZZ | J | AA | Washer,ø1.5×ø3.8×0.25mm |
| 702 | XBBSD20P03000 | J | AA | Screw,ø2×3mm |

# CD-XP120W

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| 703 | XBBSD26P06000 | J | AA | Screw,ø2.6×6mm |
| 704 | XHBSD20P05000 | J | AA | Screw,ø2×5mm |
| NM801 | RMOTV0409AFM1 | J | AN | Motor with Gear [Sled] |
| NM802 | RMOTV0003SJM1 | J | AP | Motor with Chassis [Spindle] |
| SW4 | QSW-F9001AWZZ | J | AE | Switch,Leaf Type [Pickup In] |

## CABINET PARTS

| | | | | |
|---|---|---|---|---|
| 201 | CPNLC1061SJ02 | J | BN | Front Panel Ass'y |
| 201- 1 | ———— | | — | Front Panel (Not Replacement Item) |
| 201- 2 | JKNBZ0073SJSA | J | AE | Button,Power |
| 201- 3 | JKNBZ0066SJSA | J | AG | Button,Function |
| 201- 4 | GCOVA1022SJSA | J | AD | Cover,Remote Sensor |
| 201- 5 | JKNBZ0068SJSA | J | AE | Button,Equalizer/X-Bass/Demo |
| 201- 6 | JKNBZ0064SJSA | J | AE | Button,Operation |
| 201- 7 | NGERH0001SJSA | J | AD | Gear,Damper |
| 201- 8 | HDECQ0100SJSA | J | AE | Panel,Amp. |
| 201- 9 | GCOVA1023SJSA | J | AD | Cover,Timer LED |
| 202 | GITAS0006SJ01 | J | AM | Side Panel Ass'y,Left |
| 202- 1 | ———— | | — | Side Panel, (Not Replacement Item) |
| 202- 2 | PCUSG0014SJZZ | J | AD | Cushion,Leg |
| 203 | GITAS0007SJ01 | J | AM | Side Panel Ass'y,Right |
| 203- 1 | ———— | | — | Side Panel, (Not Replacement Item) |
| 203- 2 | PCUSG0014SJZZ | J | AD | Cushion,Leg |
| 204 | GCAB-1001SJSA | J | AP | Top Cabinet |
| 205 | GCOVA1019SJSA | J | AG | Cover,Cassette [Tape 1] |
| 206 | GCOVA1020SJSA | J | AG | Cover,Cassette [Tape 2] |
| 207 | GCOVA1021SJSA | J | AG | Cover,CD Tray |
| 208 | GDORF0026SJSA | J | AF | Holder,Cassette [Tape 1] |
| 209 | GDORF0027SJSA | J | AF | Holder,Cassette [Tape 2] |
| 210 | JKNBZ0072SJSA | J | AE | Knob,Mic |
| 211 | GITAR0044SJSA | J | AM | Rear Panel [Except for Argentina] |
| 211 | GITAR0049SJSA | J | | Rear Panel [For Argentina] |
| 212 | LANGK0043SJFW | J | AB | Holder,Mic |
| 213 | HDECQ0087SJSA | J | AD | Panel,Cassette [Tape 1] |
| 214 | HDECQ0088SJSA | J | AD | Panel,Cassette [Tape 2] |
| 215 | JBTN-0025SJSA | J | AD | Button,Record [Tape 1] |
| 216 | JBTN-0026SJSA | J | AD | Button,Play [Tape 1] |
| 217 | JBTN-0027SJSA | J | AD | Button,Rewind [Tape 1] |
| 218 | JBTN-0028SJSA | J | AD | Button,Fast Forward [Tape 1] |
| 219 | JBTN-0029SJSA | J | AD | Button,Stop [Tape 1] |
| 220 | JBTN-0030SJSA | J | AD | Button,Pause [Tape 1] |
| 221 | JBTN-0031SJSA | J | AD | Button,Play [Tape 2] |
| 222 | JBTN-0032SJSA | J | AD | Button,Rewind [Tape 2] |
| 223 | JBTN-0033SJSA | J | AD | Button,Fast Forward [Tape 2] |
| 224 | JBTN-0034SJSA | J | AD | Button,Stop [Tape 2] |
| 225 | KMECB0010SJZZ | J | BA | Tape Mechanism Ass'y |
| 225- 1 | 9GDSO2210173 | J | | Pinch Roller Arm Ass'y |
| 225- 2 | 9GDSO2210169 | J | | Head,Erase [Tape 1] |
| 225- 3 | 9GDSO2210170 | J | | Head,Record/Playback |
| 225- 4 | 9GDSO2210613 | J | | Belt,Main |
| 225- 5 | 9GDSO2210612 | J | | Belt,FF/REW |
| 225- 6(SW5,SW8) | 9GDSO2210171 | J | | Switch,Leaf Type,Play |
| 225- 7(SW6,7) | 9GDSO2210172 | J | | Switch,Leaf Type,FF/REW |
| 225- 8(M2) | 9GDSO2210168 | J | | Motor with Pulley [Tape] |
| 226 | LANGK0040SJFW | J | AD | Bracket,Rear Panel |
| 227 | LCHSM0020SJFW | J | AN | Chassis,Main |
| 228 | LANGK0042SJFW | J | | Bracket,Main PWB,B |
| 230 | LHLDW1001SJZZ | J | AD | Nylon Band |
| 231 | LHLDZ1052SJSA | J | AE | Holder,FL Display |
| 233 | MSPRD0021SJFW | J | AE | Spring,Record |
| 235 | MSPRD0027SJSA | J | | Spring,Mic |
| 236 | MSPRD0023SJFJ | J | AD | Spring,Cassette Holder |
| 237 | PCOVS1008SJSA | J | AG | Cover,Power |
| 239 | PCOVS3007SJFW | J | AF | Cover |
| 240 | PCUSG0010SJZZ | J | AD | Cushion,Leg |
| 241 | PRDAR0060SJFW | J | AF | Heat Sink |
| 242 | PRDAR0063SJFW | J | | Heat Sink |
| 243 | PRDAR0075SJFW | J | AP | Heat Sink |
| ⚠ 250 | QFSHD0001AWZZ | J | AB | Holder,Fuse |
| 251 | 9GDM03-SCT01 | J | | Bush,Changer |
| 252 | 9GDM03-SZP01 | J | | Turntable |
| 253 | 9GDM03-JYT01 | J | | Yoke,Chucking |
| 254 | 9GDM03-CT001 | J | | Magnet |
| 255 | 9GDM03-SYP01 | J | | Stabilizer |
| 256 | 9GDM03-SCT01 | J | | Loading Tray |
| 257 | 9GDM03-XHQ01 | J | | Cushion,Ring |

| NO. | PARTS CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|
| 258 | 9GDM03-XPD01 | J | | Belt |
| 259 | 9GDM03-SCL06 | J | | Gear,Transporting |
| 260 | 9GDM03-SCL01 | J | | Pulley,Loading |
| 261 | 9GDM03-JDB03 | J | | Base,Transporting Parts |
| 262 | 9GDM03-SCL05 | J | | Gear,Abaxial |
| 263 | 9GDM03-SCL04 | J | | Gear,Drive |
| 264 | 9GDM03-JSP01 | J | | Slice,Limiting |
| 265 | 9GDM03-SCL02 | J | | Gear,Tarns |
| 266 | 9GDM03-SCL03 | J | | Gear,Blidge |
| 267 | 9GDM03-SHB01 | J | | Skateboard |
| 268 | 9GDM03-JZZ01 | J | | Axis,Rotational |
| 269 | 9GDM03-JZZ02 | J | | Axis,Locating |
| 270 | 9GDM03-JDB02 | J | | Base,Rotational Parts |
| 271 | 9GDM03-SJZ01 | J | | Base,Motor |
| 272 | 9GDM03-SZT01 | J | | Bush |
| 273 | 9GDM03-JDB01 | J | | Soleplate |
| 274 | 9GDM03-SDK02 | J | | Pad,Right |
| 275 | 9GDM03-SDB01 | J | | Pad,Small |
| 276 | 9GDM03-SDZ02 | J | | Base,Right |
| 277 | 9GDM03-SDK01 | J | | Pad,Left |
| 278 | 9GDM03-SDZ01 | J | | Base,Left |
| 279 | 9GDM03-JYP01 | J | | Slice,Iron |
| 280 | 9GDM03-JCH01 | J | | Spring,Thick |
| 281 | 9GDM03-XXJ01 | J | | Rubber,Absorping |
| 282 | 9GDM03-SGJ01 | J | | Frame,Load |
| 283 | 9GDM03-STG01 | J | | Bar,Switch |
| 284 | 9GDM03-SCG01 | J | | Bar,Selecting |
| 601 | LX-BZ0003SJZZ | J | AE | Screw,Transport |
| 602 | 9GDM03-LD003 | J | | Screw,Special |
| 603 | 9GDM03-LD004 | J | | Screw,Special |
| 604 | LX-JZ0001SJFD | J | AA | Screw,ø3×10mm |
| 605 | LX-JZ0002SJFD | J | AD | Screw,Special |
| 609 | XHBSD30P06000 | J | AA | Screw,ø3×6mm |
| 610 | XHBSF30P06000 | J | AA | Screw,ø3×6mm |
| 611 | XHBSF30P08000 | J | AA | Screw,ø3×8mm |
| 612 | XHSSD30P08000 | J | AA | Screw,ø3×8mm |
| 613 | XJBSD25P10000 | J | AD | Screw,ø2.5×10mm |
| 614 | LX-BZ0004SJZZ | J | AD | Screw,Special |
| 615 | XHBSF30P08000 | J | | Screw,ø3×8mm |
| 616 | XJBSD30P24000 | J | AA | Screw,ø3×24mm |
| 617 | XJBSF30P08000 | J | AA | Screw,ø3×8mm |
| 618 | XJBSF30P10000 | J | AA | Screw,ø3×10mm |
| 619 | XJBSF30P16000 | J | AA | Screw,ø3×16mm |
| 620 | XHBSF30P08000 | J | AA | Screw,ø3×8mm |
| 621 | XJBSF30P37000 | J | | Screw,ø3×37mm |
| 622 | XBBSD20P03000 | J | AA | Screw,ø2x3mm |

## ACCESSORIES/PACKING PARTS

| | | | | |
|---|---|---|---|---|
| | SPAKC0249SJZZ | J | AQ | Packing Case |
| | SPAKC0259SJZZ | J | | Packing Case |
| | TINSE0106SJZZ | J | AF | Operation Manual [For Australia/New Zealand] |
| | TINSZ0159SJZZ | J | AK | Operation Manual [Except for Australia/New Zealand] |
| ⚠ | QACCA0002SJ00 | J | AL | AC Power Supply Cord |
| ⚠ | QACCE0002SJZZ | J | AH | AC Power Supply Cord |
| ⚠ | QACCL0002SJ00 | J | AL | AC Power Supply Cord |
| ⚠ | QACCZ0006SJ00 | J | AQ | AC Power Supply Cord |
| | QANTL0005SJZZ | J | AG | AM/FM Loop Antenna |
| | SPAKA0120SJZZ | J | AG | Packing Add.,Left |
| | SPAKA0121SJZZ | J | AG | Packing Add.,Right |
| | SSAKA0002SJZZ | J | AE | Polyethylene Bag,Accessories |
| | SSAKH0017SJZZ | J | AF | Polyethylene Bag,Unit |
| | TCAUZ0032SJZZ | J | AB | Sheet,Caution |
| | TCAUZ0033SJZZ | J | AB | Sheet,Caution |
| | TLABS0042SJZZ | J | AB | Label,Caution |
| | TLABZ0117SJZZ | J | | Label,Bar Code |
| | TLABZ0075SJZZ | J | AE | Label,Feature [Tape 1] [For Australia/New Zealand] |
| | TLABZ0081SJZZ | J | AD | Label,Feature [Tape 1] [Except for Australia/New Zealand] |
| | TLABZ0080SJZZ | J | AD | Label,Feature [Tape 2] |
| | RRMCG0047SJSA | J | AQ | Remote Control |
| | GFTAT1121AFSA | J | AB | Battery Lid,Remote Control |

| NO. | PART CODE | ★ | PRICE RANK | DESCRIPTION |
|---|---|---|---|---|

## P.W.B. ASSEMBLY (Not Replacement Item)

| | | | | |
|---|---|---|---|---|
| PWB-A1~9 | DCEKAV233SJ03 | J | — | Main/CD Servo/Headphones/ Switch A/Switch B/CD Loading Motor/T/TUp/Down Motor/ Speaser/Mic (Combined Ass'y) |
| PWB-B | DCEKNV233SJ03 | J | — | Display |
| PWB-C | QPWBF3895AFZZ | J | AC | CD Motor (PWB Only) |
| ⚠ PWB-D | DCEKKV233SJ03 | J | — | Power |

## OTHER SERVICE PART

| | | | | |
|---|---|---|---|---|
| | UDSKA0004AFZZ | J | AZ | CD Pickup Lens Cleaner |

**CP-XP120**

## SPEAKER BOX PART

| | | | | |
|---|---|---|---|---|
| | B3CPXP120W | J | | Speaker Ass'y |

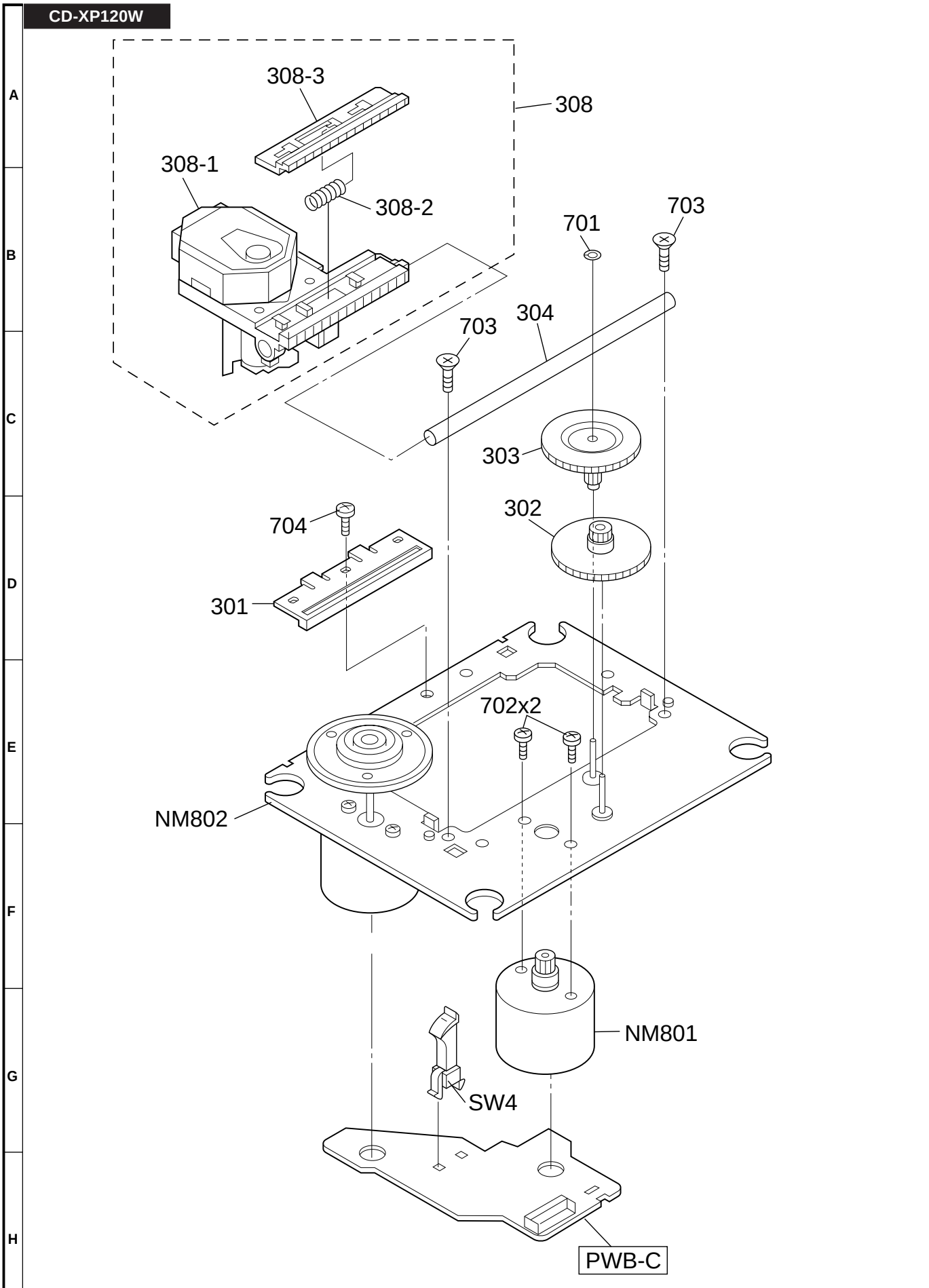
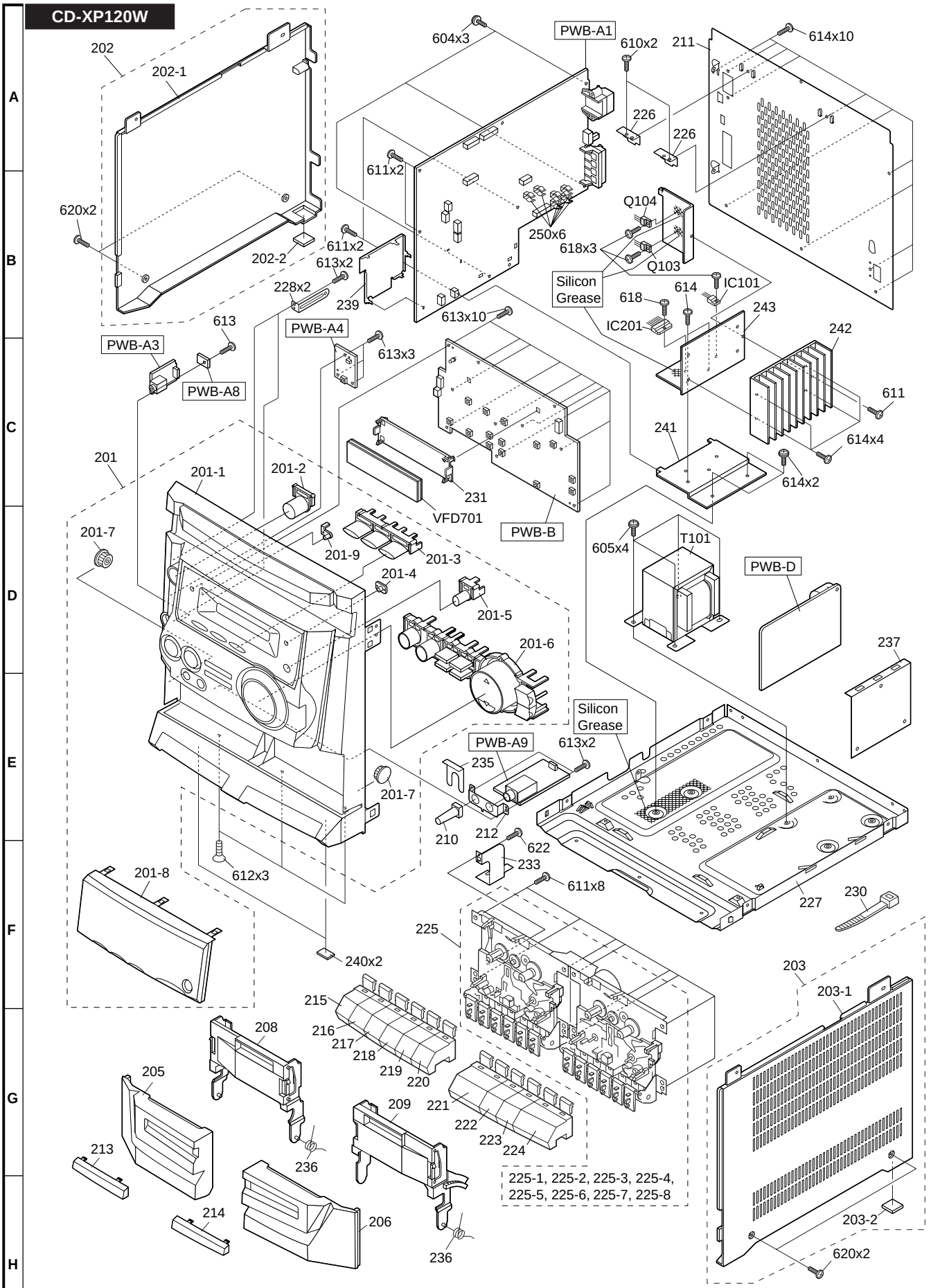



**Figure 7 CD MECHANISM EXPLODED VIEW**




Note: Only the unit and consumable parts are supplied as parts supply for the Tape mechanism.

**Figure 8 CABINET EXPLODED VIEW (1/2)**

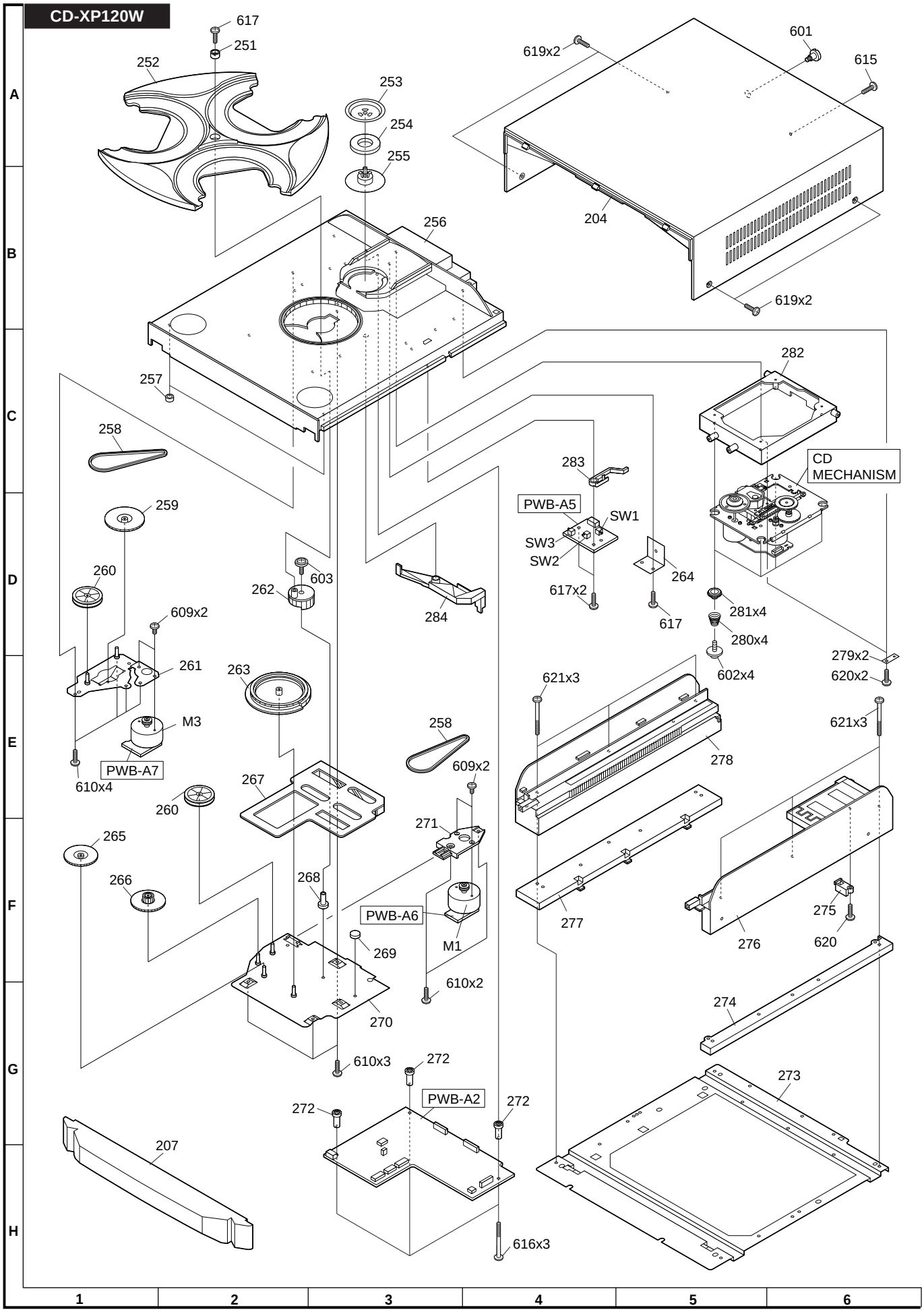



**Figure 9 CABINET EXPLODED VIEW (2/2)**

— M E M O —

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